

**GUERNSEY COUNTY**  
**MUSKINGUM COUNTY**

Project Earth Disturbed Area =  
N/A (Maintenance Project)  
Estimated Contractor Earth Disturbed Area =  
N/A (Maintenance Project)  
Notice of Intent Earth Disturbed Area =  
N/A (Maintenance Project)

| LOCATION | COUNTY | ROUTE | BEGIN<br>SLM | END<br>SLM | LENGTH<br>MILES | CITY/VILLAGE |
|----------|--------|-------|--------------|------------|-----------------|--------------|
| 1        | MUS    | 209   | 0.00         | 1.64       | 1.64            |              |
| 2        | GUE    | 209   | 0.00         | 5.54       | 5.54            |              |
| 3        | GUE    | 209   | 5.54         | 7.07       | 1.53            |              |
| 4        | GUE    | 209   | 7.07         | 7.64       | 0.57            |              |
| 5        | GUE    | 209   | 7.64         | 8.11       | 0.47            | CAMBRIDGE    |

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

DATE 1-30-15 DIRECTOR, DEPARTMENT OF  
TRANSPORTATION

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| DESIGN DESIGNATION          | LOCATION 1 | LOCATION 2 | LOCATION 3 | LOCATION 4 | LOCATION 5 |
|-----------------------------|------------|------------|------------|------------|------------|
|                             | 0.00-1.64  | 0.00-5.54  | 5.54-7.07  | 7.07-7.64  | 7.64-8.11  |
| Functional Classification   | RMC        | RMC        | RMC*       | UMC        | UMC        |
| Opening Year ADT (2015)     | 470        | 990        | 2,300      | 4,300      | 4,300      |
| Design Year ADT (2027)      | 480        | 990        | 2,300      | 4,300      | 4,300      |
| Design Hourly Volume (2027) | 60         | 100        | 210        | 390        | 390        |
| Directional Distribution    | 56%        | 65%        | 70%        | 70%        | 70%        |
| Trucks (24 Hour B&C)        | 1%         | 5%         | 6%         | 9%         | 9%         |
| Design Speed                | 55mph      | 55mph      | 55mph      | 35mph      | 35mph      |
| Legal Speed                 | 55mph      | 55mph      | 55mph      | 35mph      | 35mph      |

RMC = RURAL MINOR COLLECTOR  
RMC\* = RURAL MAJOR COLLECTOR  
UMC = URBAN MAJOR COLLECTOR

**DESIGN EXCEPTIONS: NONE**

**UNDERGROUND UTILITIES**

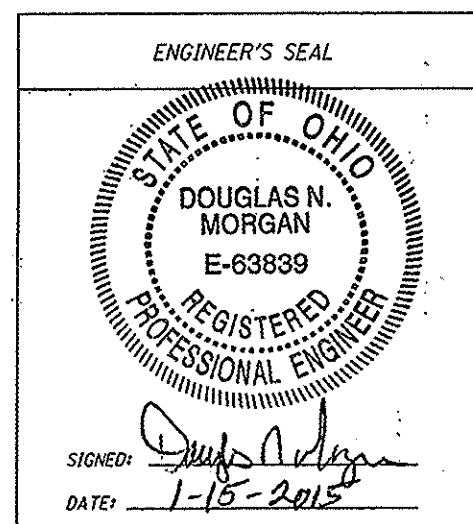
CONTACT BOTH SERVICES  
CALL TWO WORKING DAYS  
BEFORE YOU DIG

CALL  
**1-800-362-2764**  
(TOLL FREE)

 OHIO UTILITIES PROTECTION SERVICE  
NON-MEMBERS  
MUST BE CALLED DIRECTLY 

**OIL & GAS PRODUCERS PROTECTIVE  
SERVICE CALL: 1-800-925-0988**

PLAN PREPARED BY:  
OHIO DEPARTMENT OF TRANSPORTATION  
DISTRICT 5 PLANNING & ENGINEERING



| STANDARD CONSTRUCTION DRAWINGS |         |          |         | SUPPLEMENTAL SPECIFICATIONS |         |
|--------------------------------|---------|----------|---------|-----------------------------|---------|
| BP-3.1                         | 7/18/14 | TC-65.10 | 1/17/14 | 800                         | 1-21-15 |
| BP-4.1                         | 7/19/13 | TC-65.11 | 7/18/14 | 832                         | 1-17-14 |
| BP-5.1                         | 7/19/13 | TC-71.10 | 1/17/14 |                             |         |
|                                |         |          |         |                             |         |
|                                |         |          |         |                             |         |
| MT-97.10                       | 7/18/14 |          |         |                             |         |
| MT-97.12                       | 7/18/14 |          |         |                             |         |
| MT-99.20                       | 7/19/13 |          |         | SPECIAL PROVISIONS          |         |
| MT-101.90                      | 7/18/14 |          |         |                             |         |
| MT-105.10                      | 7/19/13 |          |         |                             |         |
|                                |         |          |         |                             |         |
|                                |         |          |         |                             |         |



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UTILITIES

THERE ARE NO UNDERGROUND UTILITIES SHOWN ON THIS PLAN. THE NATURE OF THE WORK REQUIRED BY THIS PROJECT WILL NOT AFFECT ANY KNOWN UNDERGROUND UTILITIES THAT EXIST UNDER OR ADJACENT TO THE WORK AREA.

CONTINGENCY QUANTITIES

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE ENGINEER" UNLESS AUTHORIZED BY THE ENGINEER. THE ACTUAL WORK LOCATIONS AND QUANTITIES USED FOR SUCH ITEMS SHALL BE INCORPORATED INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT.

NOTIFICATION OF ROAD CLOSURE OR RESTRICTION

THE CONTRACTOR WILL ADVISE THE PROJECT ENGINEER A MINIMUM OF TWENTY ONE (21) DAYS PRIOR TO THE FOLLOWING: THE START OF CONSTRUCTION ACTIVITIES, LANE RESTRICTIONS, LANE CLOSURES, AND OR ROAD CLOSURES. THE PROJECT ENGINEER WILL FORWARD THIS INFORMATION TO THE FOLLOWING:

DISTRICT PUBLIC INFORMATION OFFICER (PIO) BY FAX AT (614) 887-4510 OR EMAIL AT [D05.PIO@DOT.STATE.OH.US](mailto:D05.PIO@DOT.STATE.OH.US)

DISTRICT PERMIT SECTION BY FAX AT (614) 887-4525 OR EMAIL AT [BRIAN.BOSCH@DOT.STATE.OH.US](mailto:BRIAN.BOSCH@DOT.STATE.OH.US)

CENTRAL OFFICE SPECIAL HAUL PERMITS SECTION BY FAX AT (614) 728-4099 OR EMAIL AT [HAULING.PERMITS@DOT.STATE.OH.US](mailto:HAULING.PERMITS@DOT.STATE.OH.US)

THE PIO WILL, IN TURN, NOTIFY THE PUBLIC, THE LOCAL EMERGENCY SERVICES, AFFECTED SCHOOLS AND BUSINESSES, AND ANY OTHER IMPACTED LOCAL PUBLIC AGENCY OF ANY OF THE ABOVE MENTIONED ITEMS, VIA MEDIA SOURCES.

PAVEMENT MARKING

STOP LINES, CROSSWALK LINES, CHANNELIZING LINES, ETC., SHOWN IN THE PLANS ARE TAKEN FROM EXISTING MARKINGS. THE CONTRACTOR SHALL DOCUMENT ALL OF THE EXISTING PAVEMENT MARKING LOCATIONS THAT WILL BE REMOVED/OBLITERATED DURING THIS PROJECT. THE CONTRACTOR SHALL PLACE NEW PAVEMENT MARKINGS AT THE LOCATION OF THE EXISTING MARKINGS UNLESS OTHERWISE DIRECTED BY THE ENGINEER. DOCUMENTATION OF PAVEMENT MARKING SHALL BE SUPPLIED TO THE ENGINEER BEFORE COMMENCEMENT OF ANY OPERATION WHICH WILL REMOVE/OBLITERATE MARKINGS. THE METHOD OF DOCUMENTATION SHALL BE APPROVED BY THE ENGINEER IN ORDER TO PROVIDE AN ACCEPTABLE TOLERANCE BETWEEN THE EXISTING AND PROPOSED PAVMENT MARKINGS.

PROFILE AND ALIGNMENT

PLACE THE PROPOSED PAVEMENT TO FOLLOW THE ALIGNMENT AND PROFILE OF THE EXISTING PAVEMENT. PREVIOUS CONSTRUCTION PLANS, SHOWING THE ORIGINAL ALIGNMENT AND PROFILE, ARE AVAILABLE FOR INSPECTION AT THE ODOT SISTRICT 5 OFFICE.

PART WIDTH CONSTRUCTION

BECAUSE OF THE NECESSITY TO BUILD THIS PROJECT UNDER TRAFFIC ABD TO CONSTRUCT THE FULL PAVEMENT WIDTH IN STAGES, EXERCISE CARE TO PREVENT THE CONSTRUCTION OF A BUTT JOINT IN THE BASE COURSE. LAP LONGITUDINAL JOINTS AS SHOWN ON STANDARD CONSTRUCTION DRAWING BP-3.1

ITEM 202 REMOVAL MISC: UTILITY POLE FOUNDATION REMOVED

REMOVE THE EXISTING UTILITY POLE FOUNDATION TO AT LEAST 1 FOOT BELOW THE SUBGRADE OF THE PROPOSED WALK. BACKFILL, RESTORE SURFACES AND DISPOSE ALL REMOVED MATERIAL ACCORDING TO 105.16 AND 105.17.

PAYMENT FOR ITEM 202, REMOVAL MISC.: UTILITY POLE FOUNDATION REMOVED, SHALL BE AT THE CONTRACT UNIT PRICE PER EACH FOUNDATION, INCLUDING ALL OF THE LABOR AND EQUIPMENT NEEDED TO COMPLETE THE WORK.

ITEM 209 PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN

PREPARE THE SHOULDER FOR PAVING A CONSISTENT SAFETY EDGE IN BOTH THICKNESS AND WIDTH.

PRIOR TO PAVING THE SAFETY EDGE, GRADE AN AREA 10 INCHES WIDE, BEGINNING AT THE EDGE OF THE PAVED ROADWAY, TO PROVIDE A LEVEL SURFACE FREE OF VEGETATION FOR CONSTRUCTION OF THE SAFETY EDGE. IF NECESSARY, EXCAVATE THE GRADED AREA TO THE DEPTH NECESSARY TO CONSTRUCT THE SAFETY EDGE. COMPACT THE GRADED SHOULDER ACCORDING TO 617.05, OR AS DIRECTED BY THE ENGINEER.

IN ADDITION TO PREPARING THE SHOULDER FOR PAVING, THE CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE FROM THE ROADWAY SURFACE TO THE SHOULDER BREAK, THE EXISTING ROADWAY SHOULDERS SHALL BE GRADED AND SHAPED USING A GRADER OF ADEQUATE SIZE TO PERFORM THE WORK TO THE SATISFACTION OF THE ENGINEER.

ALL EXCESS MATERIAL REMAINING AROUND GUARDRAIL AND OTHER AREAS AFTER THE GRADER WORK IS COMPLETED AND NOT DISPOSED OF ON THE SITE, SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR. ALL EQUIPMENT, LABOR, OR INCIDENTALS REQUIRED TO COMPLETE THIS ITEM SHALL BE INCLUDED FOR PAYMENT IN THE UNIT PRICE BID FOR ITEM 209 PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN.

THIS WORK MAY BE INTERMITTENT AND SPREAD THROUGHOUT THE PROJECT LIMITS, AS DIRECTED BY THE ENGINEER. THE CONTRACTOR WILL ONLY BE PAID FOR INTERSECTIONS AND GAPS IF THEY ARE WITHIN THE LIMITS OF A SECTION MARKED BY THE ENGINEER FOR GRADING.

ALL LINEAR GRADING WORK BEYOND THE 10 INCH WIDE STRIP FOR THE SAFETY EDGE, SHALL BE DONE BEFORE PLACING THE ASPHALT SURFACE COURSE.

ITEM 253 PAVEMENT REPAIR

AN ESTIMATED QUANTITY FOR PAVEMENT REPAIR HAS BEEN INCLUDED IN THE PLAN TO BE USED AS DIRECTED BY THE ENGINEER. REPAIRS SHALL TAKE PLACE PRIOR TO ANY PLANING OPERATIONS OR PLACING OF CHIP SEAL COURSE. THE INTENT OF THIS OPERATION IS TO REPAIR THOSE AREAS OF PAVEMENT WHICH HAVE COMPLETELY FAILED (PUMPING OF SUB-BASE MATERIAL) AND NOT TO CORRECT SURFACE IRREGULARITIES. DEPTH OF EXCAVATION SHALL BE 7". THE MINIMUM WIDTH SHALL BE 4 FT. AFTER EXCAVATION HAS BEEN COMPLETED, THE FACE OF THE REPAIR SHALL BE COATED WITH 407 TACK COAT. REPLACEMENT MATERIAL WILL BE 7" OF ITEM 301 ASPHALT CONCRETE BASE, PG64-22 (PLACED AND COMPACTED IN TWO LIFTS).

REPAIR QUANTITIES MAY BE USED ON THE MAINLINE PAVEMENT OR ON PAVED SHOULDERS. ALL EXCAVATION, MATERIALS, LABOR, EQUIPMENT, TOOLS, TRAFFIC CONTROL AND INCIDENTALS NEEDED TO COMPLETE THE WORK DESCRIBED ABOVE SHALL BE PAID FOR UNDER ITEM 253 PAVEMENT REPAIR.

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE SUB-SUMMAR-IES FOR THE ABOVE DESCRIBED PURPOSE.

ITEM 253 PAVEMENT REPAIR

LOCATION 1 – 778 CU YD  
LOCATION 2 – 2075 CU YD  
LOCATION 3 – 519 CU YD  
LOCATION 4 – 70 CU YD  
LOCATION 5 – 18CU YD

ITEM 254. PAVEMENT PLANING, ASPHALT CONCRETE

DEPTH OF PLANING ON S.R. 209 SHALL BE EITHER 2.25" OR 1.25" AS SHOWN ON THE ASPHALT CONCRETE DATA SHEET. PLANING SHALL BE FULL WIDTH OF PAVEMENT, INCLUDING PAVED SHOULDERS.

THE ROADWAY SHALL BE PLANED SUCH THAT POSITIVE DRAINAGE IS CREATED FROM THE CENTER LINE TO THE EDGE OF PAVEMENT IN TANGENT SECTIONS AND SHALL FOLLOW EXISTING SUPERELEVATIONS WHERE APPLICABLE. ALL REQUIREMENTS OF ITEM 254 SHALL APPLY.

ITEM 407 TACK COAT & TACK COAT, TRACKLESS TACK

THE RATE OF APPLICATION OF THE 407 TACK COAT AND TACK COAT, TRACKLESS TACK SHALL BE SUBJECT TO ADJUSTMENT AS DIRECTED BY THE ENGINEER. PLAN QUANTITIES INDICATE AN AVERAGE APPLICATION RATE OF 0.075 GALLONS PER SQUARE YARD FOR ESTIMATING PURPOSES ONLY.

ITEM 407 TACK COAT FOR INTERMEDIATE COURSE & TACK COAT, TRACKLESS TACK FOR INTERMEDIATE COURSE

THE RATE OF APPLICATION OF THE 407 TACK COAT FOR INTERMEDIATE COURSE AND TACK COAT, TRACKLESS TACK FOR INTERMEDIATE COURSE SHALL BE SUBJECT TO ADJUSTMENT AS DIRECTED BY THE ENGINEER. PLAN QUANTITIES INDICATE AN AVERAGE APPLICATION RATE OF 0.05 GALLONS PER SQUARE YARD FOR ESTIMATING PURPOSES ONLY.

ITEM 408 PRIME COAT, AS PER PLAN

THE CONTRACTOR SHALL APPLY ONE COAT OF MC-70 (AS PER SECTION 702) AT A RATE OF 0.40 GALLON PER SQUARE YARD TO THE COMPLETED AGGREGATE SHOULDER (ITEM 617) AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE A SHIELD TO PREVENT THE SPRAYING OR DRIFTING OF LIQUID BITUMINOUS MATERIAL ONTO THE EDGE OF PAVEMENT OR EDGE LINE. THE ATTENTION OF THE CONTRACTOR IS DIRECTED TO 107.10 OF THE SPECIFICATIONS.

|                  |      |         |     |
|------------------|------|---------|-----|
| CALCULATED       | JKIN | CHECKED | DNM |
| GENERAL NOTES    |      |         |     |
| MUS - 209 - 0.00 |      |         | 2   |
| GUE - 209 - 0.00 |      |         | 40  |

**ITEM 516, 2" DEEP JOINT SEALER, AS PER PLAN**

THE CONTRACTOR SHALL PLACE A 1" X 2.0" DEEP BEAD OF JOINT SEALER (AS PER 705.04) AT THE LOCATIONS SHOWN IN PLANS. THE CONTRACTOR SHALL SAW CUT A CHANNEL FOR THE JOINT SEALER. THE COST FOR SAW CUTTING THE CHANNEL FOR THE JOINT SEALER SHALL BE INCLUDED FOR PAYMENT WITH ITEM 516, 2" DEEP JOINT SEALER, AS PER PLAN.

**ITEM 611 CATCH BASIN/ MANHOLE/ INLET ADJUSTED TO GRADE**  
**ITEM 611 CATCH BASIN RECONSTRUCTED TO GRADE**  
**ITEM 638 VALVE BOX ADJUSTED TO GRADE**

THESE ITEMS SHALL BE USED TO ADJUST CATCH BASINS, MANHOLES, INLETS, AND WATER VALVE BOXES LOCATED THROUGHOUT THE PROJECT LIMITS AS DIRECTED BY THE ENGINEER. ALL MATERIALS, LABOR, EQUIPMENT, TOOLS, AND INCIDENTALS NECESSARY TO COMPLETE THE WORK DESCRIBED SHALL BE INCLUDED FOR PAYMENT WITH THE ITEMS LISTED BELOW.

ANY GAS VALVE BOXES AND TELEPHONE COMPANY MANHOLES ON THIS PROJECT SHALL BE ADJUSTED TO GRADE BY THE RESPECTIVE OWNERS.

**LOCATION 5:**

**ITEM 611 – CATCH BASIN ADJUSTED TO GRADE – 11 EACH**

**ITEM 611 – CATCH BASIN RECONSTRUCTED TO GRADE – 1 EACH**

**ITEM 611 – MANHOLE ADJUSTED TO GRADE – 11 EACH**

**ITEM 638 – VALVE BOX ADJUSTED TO GRADE – 8 EACH**

**ITEM 617 COMPACTED AGGREGATE, AS PER PLAN**

ALL AGGREGATE SHALL BE 100% CRUSHED LIMESTONE. ALL QUALITY REQUIREMENTS EXCEPT SHALE SHALL BE WAIVED. OTHER GRADATION REQUIREMENTS SHALL BE AS SPECIFIED EXCEPT THE PLASTICITY INDEX SHALL BE WAIVED. IF SO PERMITTED, THE CONTRACTOR MAY USE RECYCLED ASPHALT CONCRETE PAVEMENT (RACP MEETING REQUIREMENTS OF 617.02) IN LIEU OF CRUSHED LIMESTONE.

**ITEM 621 RAISED PAVEMENT MARKER REMOVED**

RPM REMOVAL SHALL NOT OCCUR SOONER THAN 10 DAYS PRIOR TO RESURFACING OF THE ROADWAY. ALL RPM'S REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

**ITEM 653, TOPSOIL FURNISHED AND PLACED**

THIS ITEM SHALL CONSIST OF FURNISHING AND PLACING TOPSOIL ADJACENT TO CURB RAMPS, SIDEWALKS, AND CURBS THROUGHOUT THE PROJECT LIMITS AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL BE REQUIRED TO SEED AND MULCH THE TOPSOIL AS PER 659 OF THE 2013 CMS.

PAYMENT FOR ITEM 653, TOPSOIL FURNISHED AND PLACED, AS PER PLAN, SHALL BE AT THE CONTRACT UNIT PRICE PER CUBIC YARD OF TOPSOIL FURNISHED AND PLACED, INCLUDING ALL OF THE LABOR, MATERIALS AND EQUIPMENT NEEDED TO COMPLETE THE WORK.

**ITEM 653, TOPSOIL FURNISHED AND PLACED**  
**LOCATION 5: 14 CU. YD**

**ITEM 659, SEEDING AND MULCHING, CLASS I**

THE FOLLOWING QUANTITIES ARE PROVIDED TO PROMOTE GROWTH AND CARE OF PERMANENT SEEDED AREAS AT CURB RAMPS, SIDEWALKS AND CURB OR AS DIRECTED BY THE ENGINEER:

**ITEM 659, SEEDING AND MULCHING, CLASS I**  
**LOCATION 5: 56 SQ. YD.**

**ITEM 659, REPAIR SEEDING AND MULCHING**  
(5% OF THE PERMANENT SEEDING AREA)  
**LOCATION 5: 3 SQ. YD.**  
 $0.05 \times 56 = 2.8$

**ITEM 659, INTER-SEEDING**  
(5% OF THE PERMANENT SEEDING AREA)  
**LOCATION 5: 3 SQ. YD.**  
 $0.05 \times 56 = 2.8$

**ITEM 659, COMMERCIAL FERTILIZER**  
(ONE TON PER 7,410 SQ. YD. OF THE PERMANENT SEEDED AREA)  
**LOCATION 5: 0.02 TON**  
 $2 \times (56 \div 7,410) = 0.015$

**ITEM 659, LIME**  
(PERMANENT SEEDED AREA)  
**LOCATION 5: 0.02 ACRE**  
 $56 \text{ SQ. YD.} \times 9 \text{ SQ. FT./SQ. YD.} \div 43,560 \text{ SQ. FT./ ACRE} = 0.012 \text{ ACRE}$

**ITEM 659, WATER**  
(0.0027 M. GAL. PER SQ. YD. OF THE PERMANENT SEEDED AREA)  
**LOCATION 5: 1 M. GAL.**  
 $3 \times (56 \times 0.0027) = .454$

SEEDING AND MULCHING SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL BETWEEN THE RIGHT-OF-WAY LINES, AND WITHIN THE CONSTRUCTION LIMITS FOR AREAS OUTSIDE THE RIGHT-OF-WAY LINES COVERED BY WORK AGREEMENT OR SLOPE EASEMENT. QUANTITY CALCULATIONS FOR SEEDING AND MULCHING ARE BASED ON THESE LIMITS.

**MAIL BOX TURN OUTS**

A QUANTITY OF ASPHALT CONCRETE HAS BEEN PROVIDED IN THE PLAN TO COVER MAIL BOX TURN-OUTS. TURN-OUTS SHALL BE PAVED AS SHOWN IN THE DETAIL IN DRAWING BP-4.1. ANY EXTRA GRADING OF THE SHOULDERS, PRIME OR TACK COAT, MATERIALS, LABOR, EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE MAIL BOX TURN OUTS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE ITEMS LISTED BELOW.

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE SUB-SUMMARIES FOR THE ABOVE PURPOSES.

**ITEM 202 WEARING COURSE REMOVED**  
**LOCATION 1 – 120 SQ YD**  
**LOCATION 2 – 620 SQ YD**  
**LOCATION 3 – 150 SQ YD**  
**LOCATION 4 – 200 SQ YD**

**ITEM 441 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG 70-22M**  
**LOCATION 1 – 4.2 CU YD**  
**LOCATION 2 – 21.5 CU YD**  
**LOCATION 3 – 5.2 CU YD**  
**LOCATION 4 – 6.9 CU YD**

**ITEM 441 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448)**  
**LOCATION 1 – 3.3 CU YD**  
**LOCATION 2 – 17.2 CU YD**  
**LOCATION 3 – 4.2 CU YD**  
**LOCATION 4 – 5.6 CU YD**

**RESIDENTIAL AND COMMERCIAL DRIVES**

AN ESTIMATED QUANTITY OF ITEM 441 ASPHALT CONCRETE, HAS BEEN INCLUDED IN THE PLAN TO BE USED AS DIRECTED BY THE ENGINEER TO PAVE APPROACH AREAS TO EXISTING DRIVEWAYS. PAVING SHALL EXTEND AN AVERAGE OF 4' INTO THE DRIVEWAY (MEASURED FROM THE EDGE OF PAVEMENT OR PAVED SHOULDER IF PRESENT), WITH THE MAXIMUM DISTANCE TO BE DIRECTED BY THE ENGINEER, IN ORDER TO PROVIDE A SMOOTH TRANSITION AND/OR ELIMINATE SHORT DISTANCES OF UNDESIRABLE PROFILE. ABRUPT CHANGES IN DRIVEWAY PROFILE ARE NOT PERMITTED.

**FIELD DRIVES AND OIL WELL DRIVES SHALL NOT BE PAVED.**

GRAVEL DRIVES SHALL BE PAVED BACK AN AVERAGE OF 4' INTO THE DRIVE-WAY UNLESS OTHERWISE DIRECTED BY THE ENGINEER. CONCRETE AND ASPHALT DRIVES SHALL HAVE BUTT JOINTS OR AS SHORT AN ASPHALT TAPER AS POSSIBLE (AVERAGE OF 4') AS DIRECTED BY THE ENGINEER SO AS TO PROVIDE A SMOOTH TRANSITION. GRAVEL DRIVES WITH ASPHALT APRONS SHALL ALSO HAVE BUTT JOINTS OR AS SHORT AN ASPHALT TAPER AS POSSIBLE (AVERAGE OF 4') BUT ONLY IF THE EXISTING ASPHALT APRON IS IN AN ACCEPTABLE CONDITION TO BE PAVED OVER AS DIRECTED BY THE ENGINEER. IF THE ASPHALT APRON CANNOT BE PAVED OVER (FOR EXAMPLE, BROKEN INTO SMALL PIECES) AS DETERMINED BY THE ENGINEER, IT SHALL BE REMOVED BEFORE BEING PAVED BACK 4' INTO THE DRIVEWAY. ALL GRADING, PRIME OR TACK COAT, MATERIALS, LABOR, EQUIPMENT TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE DRIVES SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE ITEMS LISTED BELOW.

BUTT JOINT AT THE END OF ALL DRIVEWAYS SHALL BE 1.25" TO ACCOMMODATE 1.25" SURFACE COURSE. INTERMEDIATE COURSE SHOULD BE PLACED WITH AN AVERAGE THICKNESS OF 1/2", TAPERING FROM 1.00" AT THE MAINLINE TO 0.00" AT THE END OF THE DRIVE.

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE SUB-SUMMARIES FOR THE ABOVE DESCRIBED PURPOSE.

**ITEM 202 WEARING COURSE REMOVED**  
**LOCATION 1 – 340 SQ YD**  
**LOCATION 2 – 770 SQ YD**  
**LOCATION 3 – 220 SQ YD**  
**LOCATION 4 – 230 SQ YD**

**ITEM 304 AGGREGATE BASE**  
**LOCATION 1 – 4 CU YD**  
**LOCATION 2 – 9 CU YD**  
**LOCATION 3 – 3 CU YD**  
**LOCATION 4 – 3 CU YD**

**ITEM 441 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG 70-22M**  
**LOCATION 1 – 11.8 CU YD**  
**LOCATION 2 – 26.7 CU YD**  
**LOCATION 3 – 7.6 CU YD**  
**LOCATION 4 – 8.0 CU YD**

**ITEM 441 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448)**  
**LOCATION 1 – 4.7 CU YD**  
**LOCATION 2 – 10.7 CU YD**  
**LOCATION 3 – 3.1 CU YD**  
**LOCATION 4 – 3.2 CU YD**

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**ITEM SPECIAL, TACK COAT, TRACKLESS TACK**  
**ITEM SPECIAL, TACK COAT, TRACKLESS TACK FOR INTERMEDIATE**  
**COURSE**

**DESCRIPTION:** THIS WORK CONSISTS OF PREPARING AND TREATING A PAVED SURFACE WITH A TRACKLESS TACK ASPHALT EMULSION. FURNISH MATERIALS ACCORDING TO THE DEPARTMENT'S APPROVED LIST. MEET ALL REQUIREMENTS OF ITEM 407 TACK COAT IN THE CONSTRUCTION AND MATERIALS SPECIFICATIONS REQUIRED BY THE CONTRACT, EXCEPT AS NOTED BELOW.

**MATERIAL:** MEET ALL PROPERTIES OF THE APPROVED MANUFACTURER'S TRACKLESS TACK SPECIFICATION REQUIREMENTS ON FILE WITH THE LABORATORY AT TIME OF PLACEMENT.

**ACCEPTANCE AND SAMPLING OF MATERIALS:**  
SUPPLY CERTIFIED TEST DATA TO THE ENGINEER AND TO THE DISTRICT LABORATORY DEMONSTRATING THE TRACKLESS TACK SUPPLIED WAS TESTED FOR AND MEETS ALL MATERIAL PROPERTIES SHOWN ON THE DEPARTMENT'S APPROVED LIST. DURING CONSTRUCTION, ODOT PERSONNEL WILL SAMPLE FROM THE DISTRIBUTOR AND SUPPLY TO THE DISTRICT TEST LAB A MINIMUM OF ONE QUART OF TRACKLESS TACK FOR EVERY 25,000 GALLONS USED ON THE PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR SUPPLYING THE PROPER PLASTIC QUART SAMPLING CONTAINER. CLEARLY MARK ON THE SAMPLE WITH THE MANUFACTURER'S NAME, PROJECT NUMBER, AND THE WORDS "TRACKLESS TACK".

**EQUIPMENT:** FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR CORRECT DISTRIBUTOR SETTINGS. THOROUGHLY CLEAN ALL EQUIPMENT IF PREVIOUSLY USED MATERIAL CHARGE IS DIFFERENT THAN THE PROPOSED MATERIAL.

**APPLICATION OF ASPHALT MATERIAL:** UNIFORMLY APPLY THE TRACKLESS TACK WITH A DISTRIBUTOR ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS. IF TRACKLESS TACK IS STORED FOR AN EXTENDED PERIOD OF TIME, PRIOR TO APPLICATION, AGITATE OR GENTLY CIRCULATE THE MATERIAL. ENSURE ALL NOZZLES AND SPRAY PATTERNS ARE IDENTICAL TO ONE ANOTHER ALONG THE DISTRIBUTOR SPRAY BAR. PLACE THE ANGLE OF THE NOZZLE AT A 15 TO 30 DEGREE ANGLE TO THE SPRAY BAR AXIS TO MAXIMIZE OVERLAP OR AS RECOMMENDED BY THE NOZZLE MANUFACTURER. CONTACT THE MANUFACTURER'S REPRESENTATIVE FOR REQUIRED SPRAY NOZZLE SIZE AND DISTRIBUTOR AND NOZZLE SETTINGS. APPLY AT A RATE OF 0.04 TO 0.1 GALLONS PER SQUARE YARD. DO NOT DILUTE TRACKLESS TACK. RECOMMENDED APPLICATION TEMPERATURE IS 160 °F TO 180 °F. DO NOT EXCEED 180 °F. THE ENGINEER WILL APPROVE THE QUANTITY, RATE OF APPLICATION, TEMPERATURE, DISTRIBUTOR SETTINGS, AND AREAS TO BE TREATED BEFORE APPLICATION OF THE TRACKLESS TACK COAT. THE ENGINEER WILL DETERMINE THE ACTUAL APPLICATION IN GALLONS PER SQUARE YARD BY A CHECK ON THE PROJECT.

**PERFORMANCE OF TRACKLESS TACK:** DETERMINE THE TIME TO SET FOR THE MATERIAL TO BECOME TRACKLESS. THE ENGINEER WILL REPORT ANY ISSUES WITH EXCESSIVE TIME TO SET, OR AFTER SET ISSUES WITH STICKINESS, OR PICKUP OF THE TACK TO THE DISTRICT TESTING ENGINEER AND NEW PRODUCT ENGINEER, BRAD YOUNG 614-351-2882. IF THE CERTIFIED TEST DATA FAILS TO MEET THE LAB TESTING CRITERIA, OR FIELD SAMPLES FAIL TO MEET THE LAB TEST CRITERIA, OR THE TRACKLESS TACK FAILS TO PERFORM SATISFACTORILY IN THE FIELD, AS NOTED ABOVE, THE CONTRACTOR WILL BE REQUIRED TO REPLACE AND SUPPLY ANOTHER APPROVED TRACKLESS TACK PRODUCT FOR THE REMAINDER OF THE PROJECT AT NO ADDITIONAL COST TO THE DEPARTMENT. ANY FAILING TRACKLESS TACK PRODUCT WILL BE REMOVED FROM THE DEPARTMENT'S APPROVED LIST.

THE DEPARTMENT WILL PAY FOR ACCEPTED QUANTITIES AT THE CONTRACT PRICES AS FOLLOWS:

| ITEM    | UNIT           | DESCRIPTION                                       |
|---------|----------------|---------------------------------------------------|
| SPECIAL | GALLON (LITER) | TACK COAT, TRACKLESS TACK                         |
| SPECIAL | GALLON (LITER) | TACK COAT, TRACKLESS TACK FOR INTERMEDIATE COURSE |

**SAFETY EDGE PLAN NOTE**

IN ADDITION TO THE REQUIREMENTS OF 401.12, ATTACH A DEVICE TO THE SCREED OF THE PAVER THAT CONFINES THE MATERIAL AT THE END GATE AND EXTRUDES THE ASPHALT MATERIAL IN SUCH A WAY THAT RESULTS IN A COMPACTED WEDGE SHAPE PAVEMENT EDGE OF APPROXIMATELY 30 DEGREES (NOT STEEPER THAN 40 DEGREES). ENSURE THE DEVICE MAINTAINS CONTACT WITH THE EXISTING SURFACE, AND ALLOW FOR AUTOMATIC TRANSITION TO CROSS ROADS, DRIVEWAYS AND OBSTRUCTIONS. DO NOT USE CONVENTIONAL SINGLE PLATE STRIKE OFF.

CONSTRUCTION OF SAFETY EDGE CAN BE OMITTED AT LOCATIONS WHERE EXISTING WIDTH OF GRADED SHOULDER OR BERM IS LESS THAN 12". PROJECTS WITH VARYING CONDITIONS SHOULD USE SAFETY EDGE WHERE POSSIBLE. PLAN PREPARATION HAS MADE EVERY REASONABLE ATTEMPT TO IDENTIFY POSSIBLE SAFETY EDGE LOCATIONS.

USE THE TRANS TECH SHOULDER WEDGE MAKER, THE CARLSON SAFETY EDGE END GATE, THE ADVANT-EDGER, THE TROXLER SAFETSLOPE OR A SIMILAR APPROVED-EQUAL DEVICE THAT PRODUCES THE SAME WEDGE CONSOLIDATION RESULTS. CONTACT INFORMATION FOR THESE WEDGE SHAPE COMPACTION DEVICES IS THE FOLLOWING:

|                                                                                                                                                           |                                                                                                                                                                                       |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TransTech Systems, Inc.<br>1594 State Street<br>Schenectady, NY 12304<br>1-800-724-6306<br><a href="http://www.transtechsys.com">www.transtechsys.com</a> | Advant-Edge Paving Equipment, LLC.<br>P.O. Box 9163<br>Niskayuna, NY 12309-0163<br>518-280-6090<br><a href="http://www.advantaedgepaving.com">www.advantaedgepaving.com</a>           |
| Carlson Safety Edge End Gate<br>18425 50 <sup>th</sup> Avenue East<br>Tacoma, WA 98446<br>253-875-8000                                                    | Troxler Electronics Laboratories, Inc.<br>3008 E. Cornwallis Rd.<br>Research Triangle Park, NC 27709<br>1-877-TROXLER<br><a href="http://www.troxlerlabs.com">www.troxlerlabs.com</a> |

IF ELECTING TO USE A SIMILAR DEVICE, PROVIDE PROOF THAT THE DEVICE HAS BEEN USED ON PREVIOUS PROJECTS WITH ACCEPTABLE RESULTS OR CONSTRUCT A TEST SECTION PRIOR TO THE BEGINNING OF WORK AND DEMONSTRATE WEDGE COMPACTION TO THE SATISFACTION OF THE ENGINEER. SHORT SECTIONS OF HANDWORK WILL BE ALLOWED WHEN NECESSARY FOR TRANSITIONS AND TURNOUTS OR OTHERWISE AUTHORIZED BY THE ENGINEER.

IN ADDITION TO THE REQUIREMENTS OF 401.16, MAKE THE FIRST ROLLER PASS 8 TO 12 INCHES (200 TO 300 mm) AWAY FROM TAPERED EDGE. DO NOT ROLL THE TAPER.

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE SUB-SUMMARIES TO PROVIDE EXTRA ASPHALT FOR CONSTRUCTION OF THE SAFETY EDGE:

**ITEM 441 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG 70-22M**

**LOCATION 1 – 30 CU. YD.**  
**LOCATION 2 – 101 CU. YD.**  
**LOCATION 3 – 27 CU. YD.**  
**LOCATION 4 – 10 CU. YD.**

**ITEM 644, CROSSWALK LINE, AS PER PLAN**

THE CROSSWALK LINES FOR THIS PROJECT SHALL BE CONSTRUCTED AS DETAILED ON SHEET 21.

THE CROSSWALK LINES SHALL BE PLACED PARALLEL TO THE CENTER LINE. DO NOT SKEW THE TRANSVERSE CROSSWALK LINES.

ALL MATERIAL, LABOR, EQUIPMENT, TOOLS, AND INCIDENTALS NEEDED TO PLACE THE CROSSWALK LINES SHALL BE INCLUDED IN THE UNIT PRICE BID FOR FOOT OF ITEM 644, CROSSWALK LINE, AS PER PLAN.

|               |     |              |     |
|---------------|-----|--------------|-----|
| CALCULATED    | JKN | CHECKED      | DNM |
| GENERAL NOTES |     |              |     |
| MUS-209-0.00  |     | GUE-209-0.00 |     |
| 4             |     | 40           |     |

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MAINTAINING TRAFFIC

A MINIMUM OF 1 LANE OF TRAFFIC SHALL BE MAINTAINED AT ALL TIMES ON S.R. 209 BY USE OF THE EXISTING PAVEMENT AND STANDARD DRAWING MT-97.10 OR MT-97.12.

AT NO TIME SHALL TRAFFIC BE MAINTAINED ON THE PLANED SURFACE, AT LEAST ONE COURSE OF ASPHALT CONCRETE SHALL BE IN PLACE BEFORE OPENING TO TRAFFIC.

ITEM 614 WORK ZONE CENTER LINE, CLASS II HAS BEEN ITEMIZED IN THE PLAN FOR USE ON THE MILLED SURFACE AND ON THE INTERMEDIATE COURSE. SURFACE COURSE TEMPORARY MARKINGS SHALL BE PLACED AS PER CMS 614.11, AS STATED, FULL RATE WORK ZONE MARKINGS CANNOT BE PLACED ON THE SURFACE COURSE, SINCE WE ARE USING SPRAY THERMOPLASTIC FINAL PAVEMENT MARKINGS. ALL OTHER WORK ZONE PAVEMENT MARKINGS NECESSARY SHALL BE INCLUDED IN THE LUMP SUM BID FOR MAINTAINING TRAFFIC.

NO WORK SHALL BE PERFORMED AND ALL EXISTING LANES SHALL BE OPENED TO TRAFFIC DURING THE FOLLOWING DESIGNATED HOLIDAYS OR EVENTS FOR LOCATIONS 3, 4 AND 5:

MEMORIAL DAY (MAY 30, 2015)  
NATIONAL ROAD BIKE SHOW (JUNE 20, 2015)  
INDEPENDENCE DAY (JULY 4, 2015)  
CRUISE-IN CAR SHOW (AUGUST 15, 2015)  
LABOR DAY (SEPTEMBER 7, 2015)  
OCTOBER FALL FESTIVAL (OCTOBER 2-3, 2015)

THE PERIOD OF TIME THAT THE LANES ARE TO BE OPEN DEPENDS ON THE DAY OF THE WEEK ON WHICH THE HOLIDAY OR EVENT FALLS. THE FOLLOWING SCHEDULE SHALL BE USED TO DETERMINE THIS PERIOD:

| DAY OF THE WEEK | TIME ALL LANES MUST BE OPEN TO TRAFFIC |
|-----------------|----------------------------------------|
| SUNDAY          | 12:00N FRIDAY THROUGH 6:00AM MONDAY    |
| MONDAY          | 12:00N FRIDAY THROUGH 6:00AM TUESDAY   |
| TUESDAY         | 12:00N MONDAY THROUGH 6:00AM WEDNESDAY |
| WEDNESDAY       | 12:00N TUESDAY THROUGH 6:00AM THURSDAY |
| THURSDAY        | 12:00N WEDNESDAY THROUGH 6:00AM MONDAY |
| FRIDAY          | 12:00N THURSDAY THROUGH 6:00AM MONDAY  |
| SATURDAY        | 12:00N FRIDAY THROUGH 6:00 AM MONDAY   |

NO EXTENSIONS OF TIME SHALL BE GRANTED FOR DELAYS IN MATERIAL DELIVERIES, UNLESS SUCH DELAYS ARE INDUSTRY-WIDE, OR FOR LABOR STRIKES, UNLESS SUCH STRIKES ARE AREA-WIDE.

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE OF \$50.00 FOR EACH MINUTE THE ABOVE DESCRIBED LANE CLOSURE RESTRICTIONS ARE VIOLATED.

LENGTH AND DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE AT THE APPROVAL OF THE ENGINEER. IT IS THE INTENT TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC. LANE CLOSURES OR RESTRICTIONS OVER SEGMENTS OF THE PROJECT, IN WHICH NO WORK IS ANTICIPATED WITHIN A REASONABLE TIME FRAME, AS DETERMINED BY THE ENGINEER, SHALL NOT BE PERMITTED. THE LEVEL OF UTILIZATION OF MAINTENANCE OF TRAFFIC DEVICES SHALL BE COMMENSURATE WITH THE WORK IN PROGRESS.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH CMS 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

BUTT JOINT

A BUTT JOINT WILL BE REQUIRED AT LOCATIONS SPECIFIED BELOW AND AT THE EXTRA AREAS WITH WEARING COURSE REMOVED.

BUTT JOINTS SHALL BE AS PER STANDARD CONSTRUCTION DRAWING BP-3.1 UNLESS OTHERWISE SHOWN IN THE PLANS.

MINIMUM LENGTH FOR ASPHALT WEDGE AT BUTT JOINTS SHALL BE 10'.

| LOCATION | ROUTE    | DESCRIPTION   | S.L.M. | ITEM 614<br>ASPHALT<br>CONCRETE FOR<br>MAINTAINING<br>TRAFFIC<br><br>CU. YD. |
|----------|----------|---------------|--------|------------------------------------------------------------------------------|
| 1        | S.R. 209 | BEGIN PROJECT | 0.00   | 0.4                                                                          |
| 1        |          | TOTAL         |        | 0.4                                                                          |
| 3        | S.R. 209 | GUE-209-0577  | 5.77   | 0.8                                                                          |
|          |          | GUE-209-0663  | 6.63   | 0.8                                                                          |
| 3        |          | TOTAL         |        | 1.6                                                                          |
| 4        | S.R. 209 | GUE-209-0763  | 7.63   | 0.8                                                                          |
| 4        |          | TOTAL         |        | 0.8                                                                          |
| 5        | S.R. 209 | END PROJECT   | 8.11   | 1.2                                                                          |
| 5        |          | TOTAL         |        | 1.2                                                                          |

GRINDING FOR BUTT JOINTS SHALL BE INCLUDED FOR PAYMENT WITH ITEM 254, PAVEMENT PLANING, ASPHALT CONCRETE.

ITEM 614. WORK ZONE MARKING SIGN

IN ACCORDANCE WITH CMS SECTION 614.04, THE QUANTITIES OF WORK ZONE MARKING SIGN HAVE BEEN CARRIED TO THE SUB-SUMMARIES TO BE USED AS DIRECTED BY THE ENGINEER.

W8-H12a (NO EDGE LINES): LOCATION 1- 7 EACH, LOCATION 2 – 27 EACH, LOCATION 3 – 5 EACH, LOCATION 4 – 10 EACH, LOCATION 5 – 1 EACH

R4-1 (DO NOT PASS): LOCATION 1- 7 EACH, LOCATION 2 – 28 EACH, LOCATION 3 – 7 EACH, LOCATION 4 – 10 EACH, LOCATION 5 – 10 EACH

R4-2 (PASS WITH CARE): LOCATION 2 – 3 EACH, LOCATION 3 – 2 EACH

ITEM 614, WORK ZONE MARKING SIGN

LOCATION 1 – 14 EACH  
LOCATION 2 – 58 EACH  
LOCATION 3 – 14 EACH  
LOCATION 4 – 20 EACH  
LOCATION 5 – 11 EACH

IN ADDITION, THE CONTRACTOR SHALL ERECT A "GROOVED PAVEMENT" SIGN 250 FEET IN ADVANCE OF ANY SECTION OF ROADWAY WHERE TRAFFIC MUST TRAVEL ON A PLANED SURFACE. ENSURE THESE SIGNS ARE IN PLACE BEFORE OPENING THE ROADWAY TO TRAFFIC. ERECT THESE SIGNS AT INTERSECTIONS OF THROUGH ROUTES TO WARN TRAFFIC OF THIS SURFACE CONDITION. "GROOVED PAVEMENT" SIGNS SHALL BE INCLUDED FOR PAYMENT WITH THE LUMP SUM BID FOR ITEM 614 MAINTAINING TRAFFIC AS PER CMS SECTION 614.055.

ITEM 614 - LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE

USE OF LAW ENFORCEMENT OFFICERS (LEOS) BY CONTRACTORS OTHER THAN THE USES SPECIFIED BELOW WILL NOT BE PERMITTED AT PROJECT COST. LEOS SHOULD NOT BE USED WHERE THE OMUTCD INTENDS THAT FLAGGERS BE USED.

IN ADDITION TO THE REQUIREMENTS OF CMS 614 AND THE OMUTCD, A UNIFORMED LEO WITH ANOFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHALL BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS:

- DURING THE ENTIRE ADVANCE PREPARATION AND CLOSURE SEQUENCE WHERE COMPLETE BLOCKAGE OF TRAFFIC IS REQUIRED.
- FOR LANE CLOSURES: DURING INITIAL SET-UP PERIODS, TEAR DOWN PERIODS, SUBSTANTIAL SHIFTS OF A CLOSURE POINT OR WHEN NEW LANE CLOSURE ARRANGEMENTS ARE INITIATED FOR LONG-TERM LANE CLOSURES/SHIFTS (FOR THE FIRST AND LAST DAY OF MAJOR CHANGES IN TRAFFIC CONTROL SETUP). IN GENERAL, LEOS SHOULD BE POSITIONED AT THE POINT OF LANE RESTRICTION OR ROAD CLOSURE AND TO MANUALLY CONTROL TRAFFIC MOVEMENTS THROUGH INTERSECTIONS IN WORK ZONES.

LEOS SHOULD NOT FORGO THEIR TRAFFIC CONTROL RESPONSIBILITIES TO APPREHEND MOTORISTS FOR ROUTINE TRAFFIC VIOLATIONS. HOWEVER, IF A MOTORIST'S ACTIONS ARE CONSIDERED TO BE RECKLESS, THEN PURSUIT OF THE MOTORIST IS APPROPRIATE.

THE LEOS WORK AT THE DIRECTION OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR SECURING THE SERVICES OF THE LEOS WITH THE APPROPRIATE AGENCIES AND COMMUNICATING THE INTENTIONS OF THE PLANS WITH RESPECT TO DUTIES OF THE LEOS. THE ENGINEER SHALL HAVE FINAL CONTROL OVER THE LEOS' DUTIES AND PLACEMENT, AND WILL RESOLVE ANY ISSUES THAT MAY ARISE BETWEEN THE TWO PARTIES.

THE LEO SHALL REPORT IN TO THE CONTRACTOR PRIOR TO THE START OF THE SHIFT, IN ORDER TO RECEIVE INSTRUCTIONS REGARDING SPECIFIC WORK ASSIGNMENTS DURING HIS/HER SHIFT. THE LEO IS EXPECTED TO STAY AT THE PROJECT SITE FOR THE ENTIRE DURATION OF HIS/HER SHIFT. THE LEO SHALL REPORT TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT. ONCE THE LEO HAS COMPLETED THE DUTIES DESCRIBED ABOVE AND STILL HAS TIME REMAINING ON HIS/HER SHIFT, THE LEO MAY BE ASKED TO PATROL THROUGH THE WORK ZONE (WITH FLASHING LIGHTS OFF) OR BE PLACED AT A LOCATION TO DETER MOTORISTS FROM SPEEDING. SHOULD IT BE NECESSARY TO LEAVE THE PROJECT SITE, THE LEO SHALL NOTIFY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE THE LEO WITH A TWO-WAY COMMUNICATION DEVICE WHICH SHALL BE RETURNED TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT.

THE HOURS PAID SHALL INCLUDE ANY MINIMUM SHOW-UP TIME REQUIRED BY THE LAW ENFORCEMENT AGENCY INVOLVED. ANY ADDITIONAL COSTS (ADMINISTRATIVE OR OTHERWISE) INCURRED BY THE CONTRACTOR TO OBTAIN THE SERVICES OF AN LEO ARE INCLUDED WITH THE BID UNIT PRICE FOR ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE. LEOS (WITH PATROL CAR) REQUIRED BY THE TRAFFIC MAINTENANCE TASKS ABOVE SHALL BE PAID FOR ON A UNIT PRICE (HOURLY) BASIS UNDER ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE SUB-SUMMARIES.  
ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE  
LOCATION 5 – 80 HOURS

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**ITEM 614 PORTABLE CHANGEABLE MESSAGE SIGNS, AS PER PLAN**

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND REMOVE, WHEN NO LONGER NEEDED, TWO CHANGEABLE MESSAGE SIGNS, ON SITE, FOR THE DURATION OF THE PROJECT. THE SIGNS SHALL BE OF A TYPE SHOWN ON A LIST OF APPROVED PCMS UNITS MAINTAINED BY THE DIRECTOR (OFFICE OF MATERIALS MANAGEMENT). THE APPROVED LIST OF PORTABLE CHANGEABLE MESSAGE SIGNS CAN BE FOUND ON THE ODOT WEBSITE BY CLICKING ON THE SERVICES MENU, THEN LICKING ON MATERIALS MANAGEMENT. THE LIST CONTAINS CLASS A AND B UNITS WITH MINIMUM LEGIBILITY DISTANCES OF 650 FT. AND 475 FT., RESPECTIVELY.

EACH SIGN SHALL BE TRAILER-MOUNTED AND EQUIPPED WITH A FUNCTIONAL DIMMING MECHANISM, TO DIM THE SIGN DURING DARKNESS, AND A TAMPER AND VANDAL PROOF ENCLOSURE. EACH SIGN SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ON-SITE PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT. THE SIGN SHALL ALSO BE CAPABLE OF BEING POWERED BY AN ELECTRICAL SERVICE DROP FROM A LOCAL UTILITY COMPANY. PCMS TRAILERS SHOULD BE DELINEATED ON A PERMANENT BASIS BY AFFIXING RETROREFLECTIVE MATERIAL, IN A CONTINUOUS LINE ON THE FACE OF THE TRAILER AS SEEN BY ONCOMING ROAD USERS.

THE PROBABLE PCMS LOCATIONS AND WORK LIMITS FOR THOSE LOCATIONS ARE SHOWN ON SHEET(S) OF THE PLAN. PLACEMENT, OPERATION, MAINTENANCE AND ALL ACTIVATION OF THE SIGNS BY THE CONTRACTOR SHALL BE AS DIRECTED BY THE ENGINEER. THE PCMS SHALL BE LOCATED IN A HIGHLY VISIBLE POSITION YET PROTECTED FROM TRAFFIC. THE CONTRACTOR SHALL, AT THE DIRECTION OF THE ENGINEER, RELOCATE THE PCMS TO IMPROVE VISIBILITY OR ACCOMMODATE CHANGED CONDITIONS. WHEN NOT IN USE, THE PCMS SHALL BE TURNED OFF. ADDITIONALLY, WHEN NOT IN USE FOR EXTENDED PERIODS OF TIME, THE PCMS SHALL BE TURNED, FACING AWAY FROM ALL TRAFFIC, AND SHALL DISPLAY ONE OR MORE TYPE G YELLOW RETROREFLECTIVE SHEETING SURFACES OF 9-INCH BY 15-INCH MINIMUM SIZE FACING TRAFFIC.

THE ENGINEER SHALL BE PROVIDED ACCESS TO EACH SIGN UNIT AND SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ODOT PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT, AND TO REVISE SIGN MESSAGES, IF NECESSARY.

THE CONTRACTOR SHALL IMPLEMENT A SYSTEM WHEREBY CHANGEABLE MESSAGES WILL BE IMPLEMENTED WITHIN 2 HOURS FOLLOWING TELEPHONE NOTIFICATION FROM THE PROJECT ENGINEER TO A DESIGNATED PHONE.

ALL MESSAGES TO BE DISPLAYED ON THE SIGN WILL BE PROVIDED BY THE ENGINEER. A LIST OF ALL REQUIRED PRE-PROGRAMMED MESSAGES WILL BE GIVEN TO THE CONTRACTOR AT THE PROJECT PRECONSTRUCTION CONFERENCE. THE SIGN SHALL HAVE THE CAPABILITY TO STORE UP TO 99 MESSAGES. MESSAGE MEMORY OR PRE-PROGRAMMED DISPLAYS SHALL NOT BE LOST AS A RESULT OF POWER FAILURES TO THE ON-BOARD COMPUTER. THE SIGN LEGEND SHALL BE CAPABLE OF BEING CHANGED IN THE FIELD. THREE-LINE PRESENTATION FORMATS WITH UP TO SIX MESSAGE PHASES SHALL BE SUPPORTED. PCMS FORMAT SHALL PERMIT THE COMPLETE MESSAGE FOR EACH PHASE TO BE READ AT LEAST TWICE.

THE PCMS SHALL CONTAIN AN ACCURATE CLOCK AND PROGRAMMING LOGIC WHICH WILL ALLOW THE SIGN TO BE ACTIVATED, DEACTIVATED OR MESSAGES CHANGED AUTOMATICALLY AT DIFFERENT TIMES OF THE DAY FOR DIFFERENT DAYS OF THE WEEK.

**ITEM 614 PORTABLE CHANGEABLE MESSAGE SIGNS, AS PER PLAN**

THE PCMS UNIT SHALL BE MAINTAINED IN GOOD WORKING ORDER BY THE CONTRACTOR IN ACCORDANCE WITH THE PROVISIONS OF CMS 614.07. THE CONTRACTOR SHALL, PRIOR TO ACTIVATING THE UNIT, MAKE ARRANGEMENTS, WITH AN AUTHORIZED SERVICE AGENT FOR THE PCMS, TO ASSURE PROMPT SERVICE IN THE EVENT OF FAILURE. ANY FAILURE SHALL NOT RESULT IN THE SIGN BEING OUT OF SERVICE FOR MORE THAN 12 HOURS, INCLUDING WEEKENDS. FAILURE TO COMPLY MAY RESULT IN AN ORDER TO STOP WORK AND OPEN ALL TRAFFIC LANES AND/OR IN THE DEPARTMENT TAKING APPROPRIATE ACTION TO SAFELY CONTROL TRAFFIC.

THE ENTIRE COST TO CONTROL TRAFFIC, ACCRUED BY THE DEPARTMENT DUE TO THE CONTRACTOR'S NONCOMPLIANCE, WILL BE DEDUCTED FROM MONEYS DUE, OR TO BECOME DUE THE CONTRACTOR ON HIS CONTRACT.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR 24-HOUR-PER-DAY OPERATION AND MAINTENANCE OF THESE SIGNS ON THE PROJECT FOR THE DURATION OF THE PHASES WHEN THE PLAN REQUIRES THEIR USE.

PAYMENT FOR THE ABOVE DESCRIBED ITEM SHALL BE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, FUELS, LUBRICATING OILS, SOFTWARE, HARDWARE AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK.

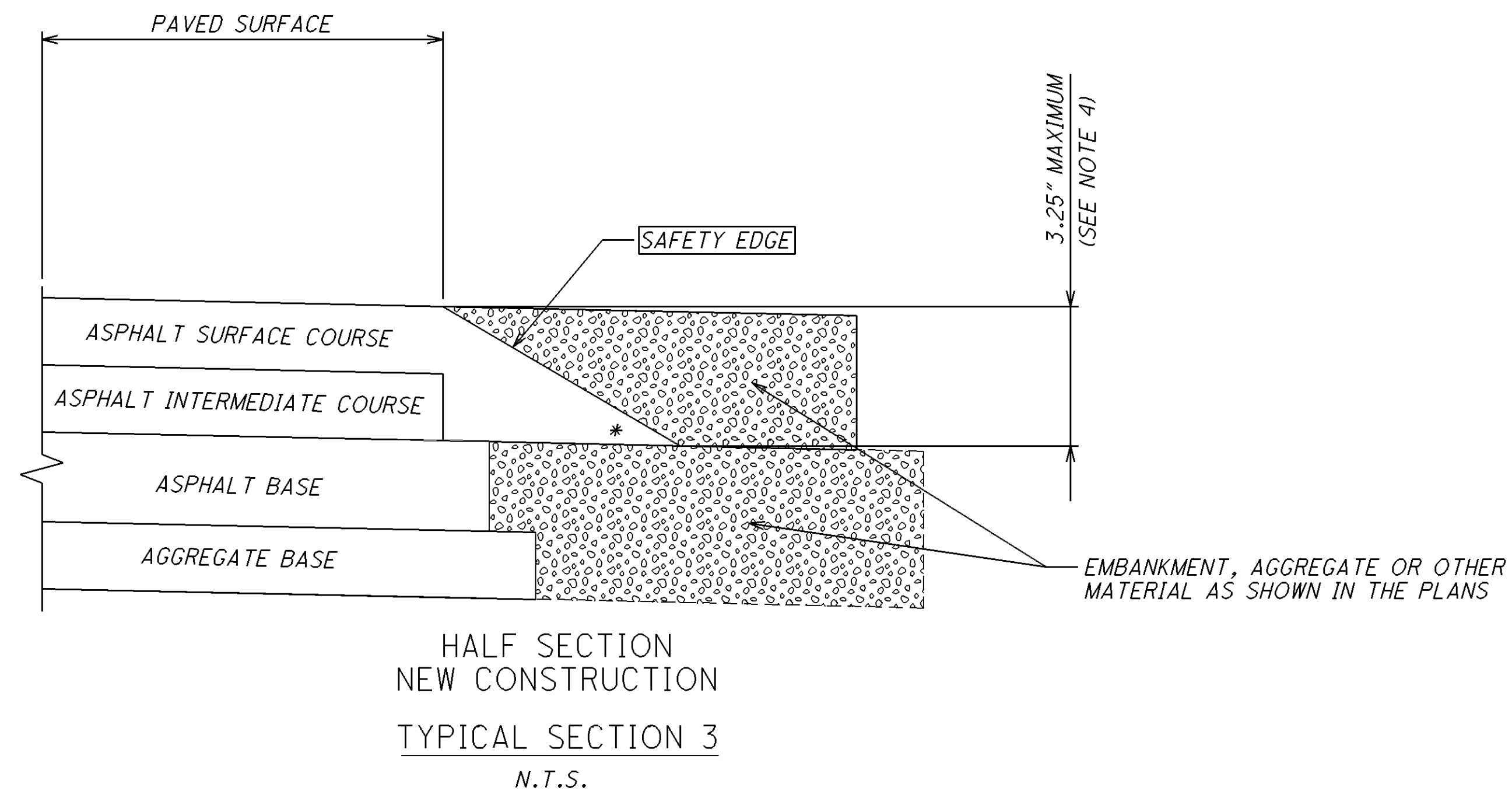
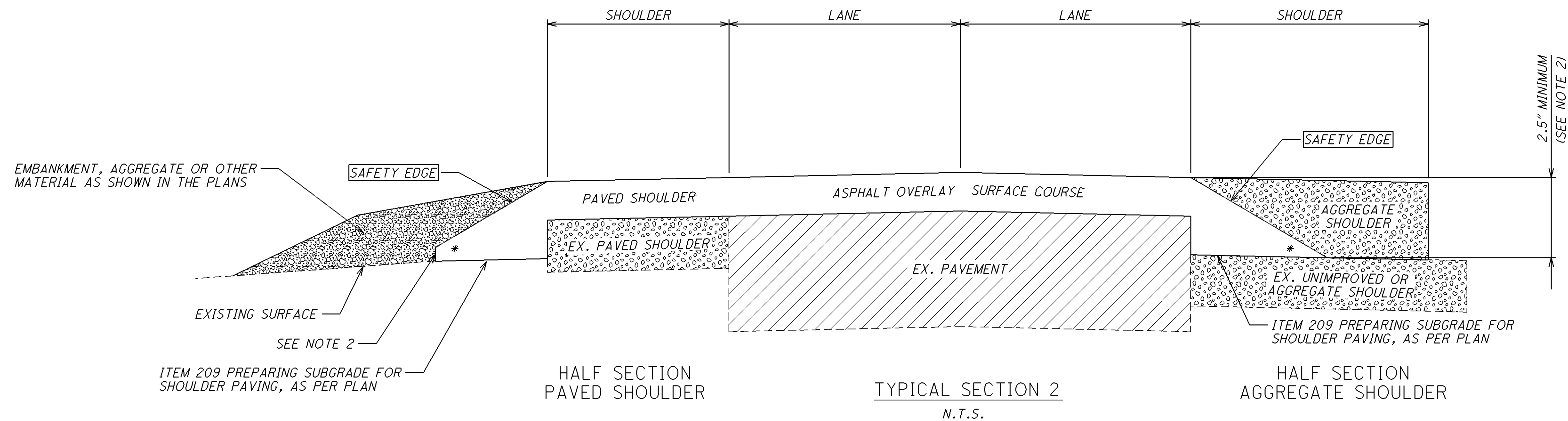
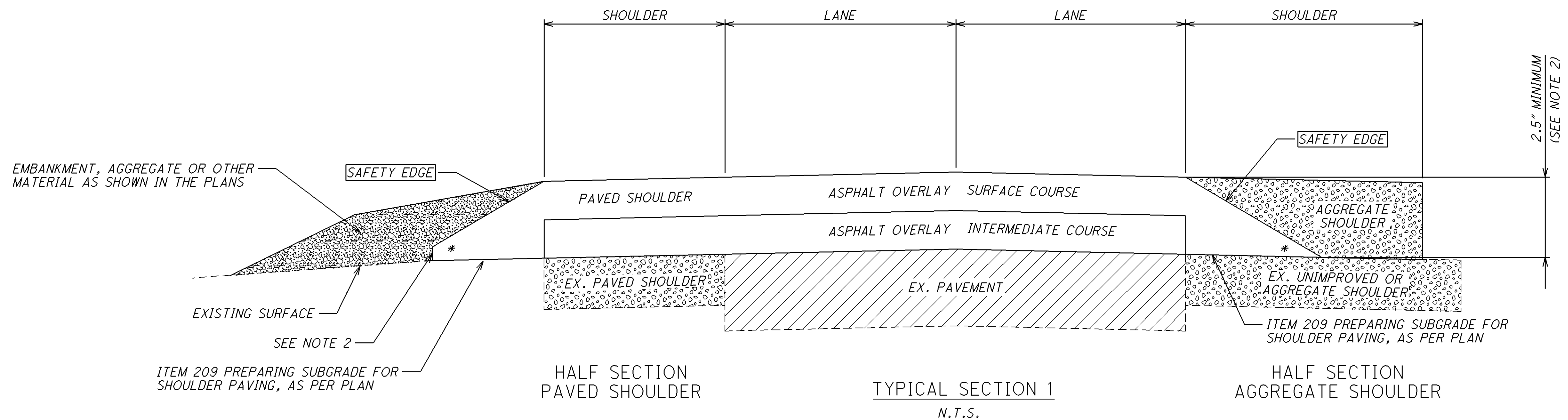
A TOTAL OF **2 PCMS** SHALL BE REQUIRED FOR THIS PROJECT.

**THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE SUB-SUMMARIES:**

**ITEM 614 PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN**  
**LOCATION 3 – 25 DAYS**  
**LOCATION 5 – 25 DAYS**

**DROPOFFS IN WORK ZONES**

DROPOFFS THAT DEVELOP DURING CONSTRUCTION OPERATIONS AND THAT ARE NOT OTHERWISE PROVIDED FOR IN THE PLANS SHALL BE TREATED AS SHOWN ON STANDARD DRAWING MT-101.90. WHERE THE PLANS DO NOT PROVIDE SPECIFIC ITEMS FOR LABOR, EQUIPMENT, OR MATERIALS TO IMPLEMENT THE DROP-OFF TREATMENTS SPECIFIED, THEY SHALL BE INCLUDED FOR PAYMENT IN THE LUMP SUM BID FOR ITEM 614, MAINTAINING TRAFFIC.

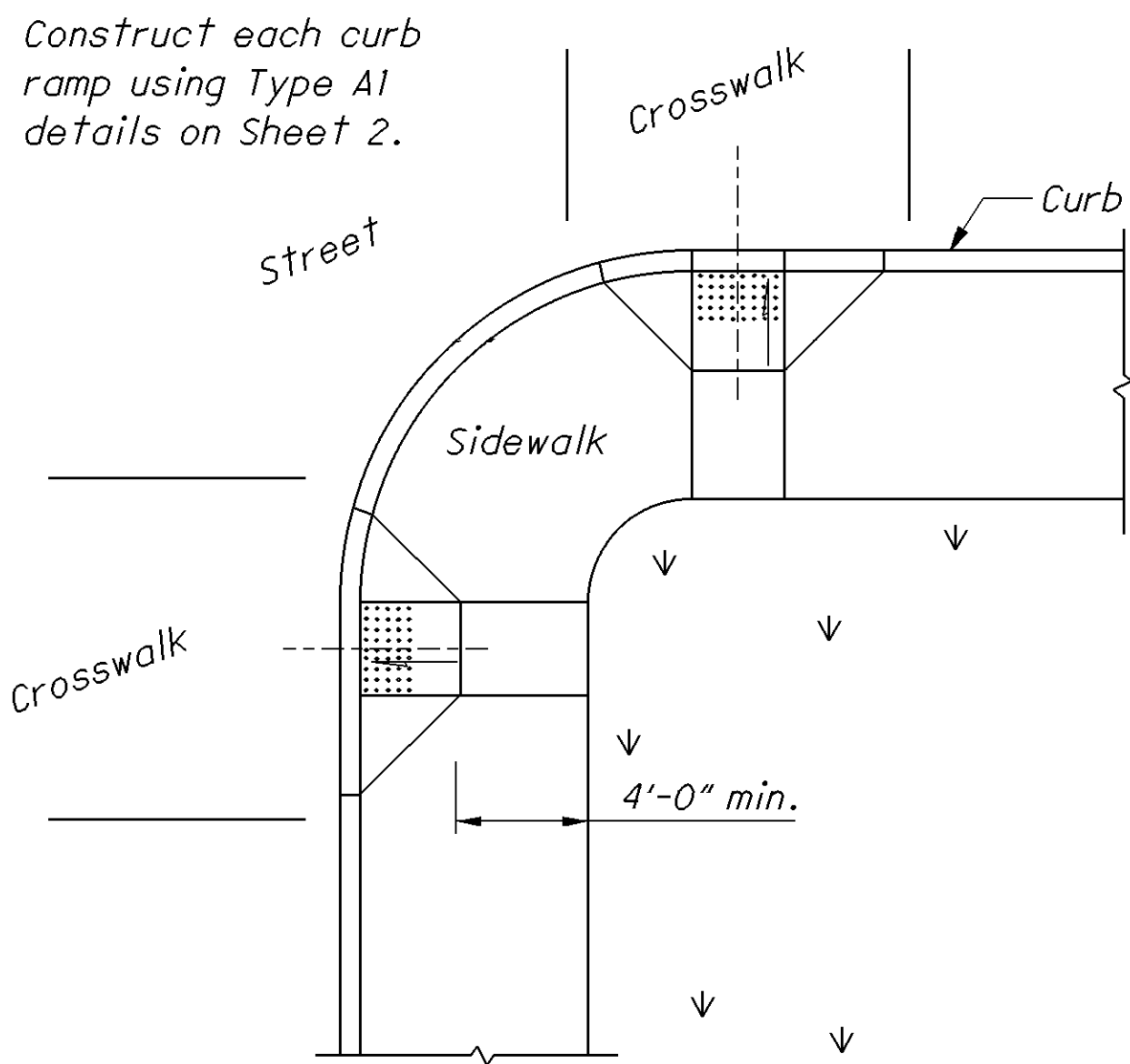


NOTES:

- 1.) SAFETY EDGES ARE REQUIRED AT THE OUTSIDE EDGES OF THE PAVED ROADWAY (EDGE OF TRAVEL LANE OR EDGE OF PAVED SHOULDER).
- 2.) CONSTRUCT THE SAFETY EDGE THE FULL ASPHALT CONCRETE OVERLAY THICKNESS OR 2.5" (63MM) WHICHEVER IS GREATER, NOT TO EXCEED THE MAXIMUM SAFETY EDGE THICKNESS OF 6" (150MM). CONSTRUCT A NEAR-VERTICAL FACE BELOW THE SAFETY EDGE FOR THICKNESS GREATER THAN 6" (150 MM).
- 3.) BLADE AND SHAPE EXISTING SHOULDER MATERIAL TO FORM A UNIFORM SURFACE UNDER THE SAFETY EDGE PRIOR TO PLACEMENT OF THE ASPHALT CONCRETE OVERLAY.
- 4.) FOR NEW PAVEMENT CONSTRUCT THE SAFETY EDGE THE FULL THICKNESS OF THE SURFACE AND INTERMEDIATE COURSES, NOT TO EXCEED 3.25" (82 MM).

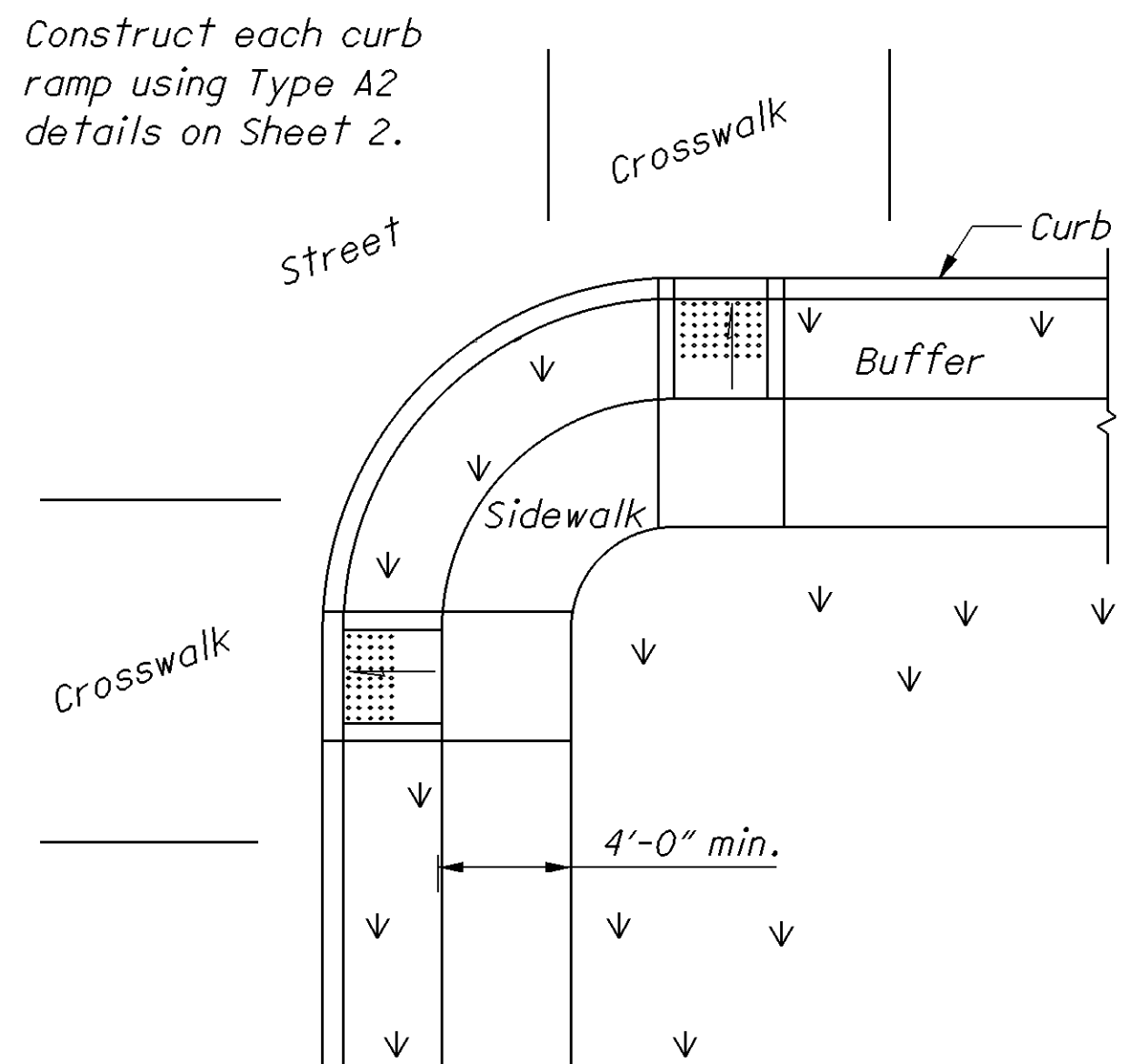
\* 40° MAX

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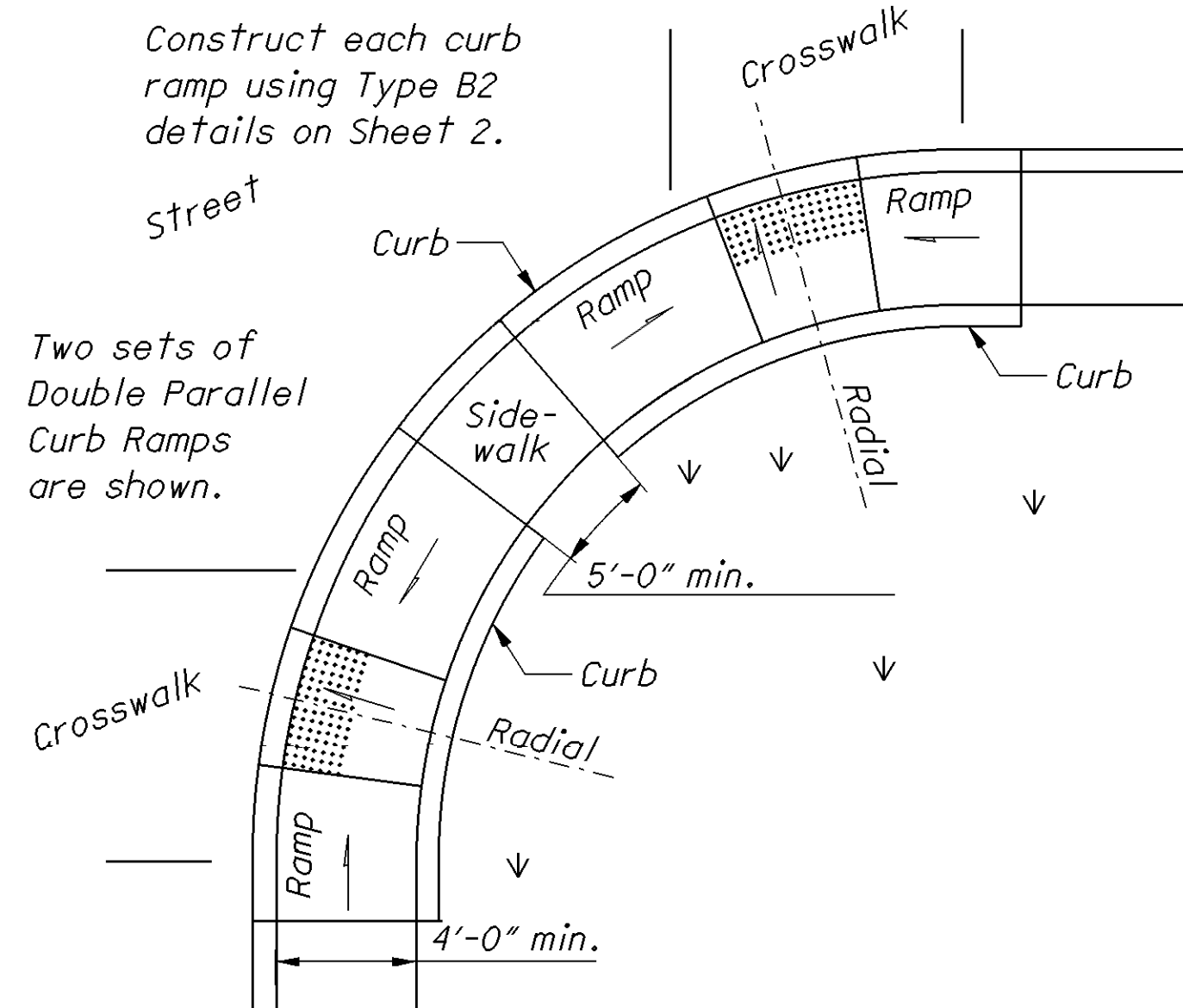


Use curb ramps with flared sides at locations with wide sidewalks.

### PERPENDICULAR CURB RAMPS

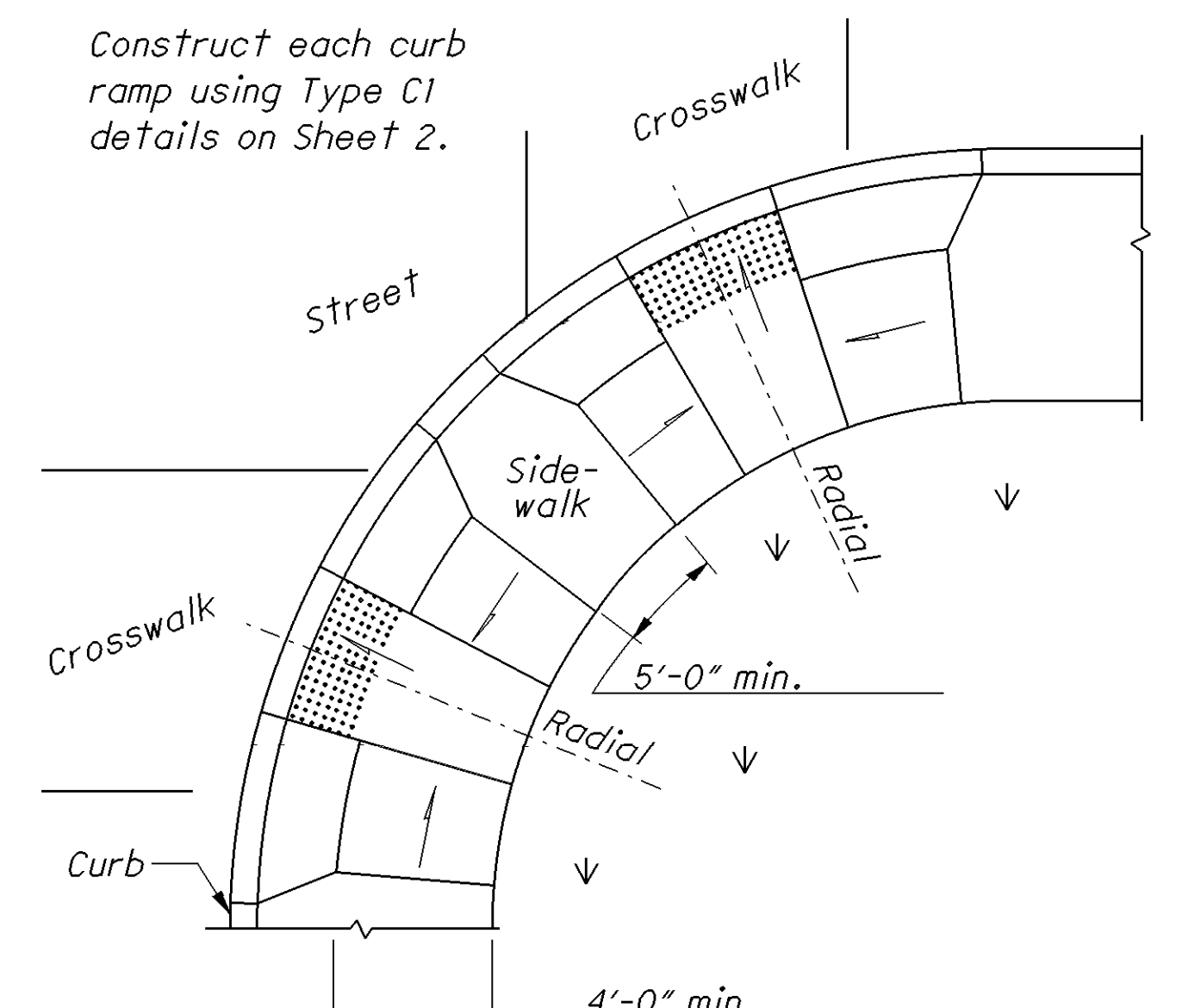


Use curb ramps with returned curbs where buffer is wide enough to accommodate ramp slope.



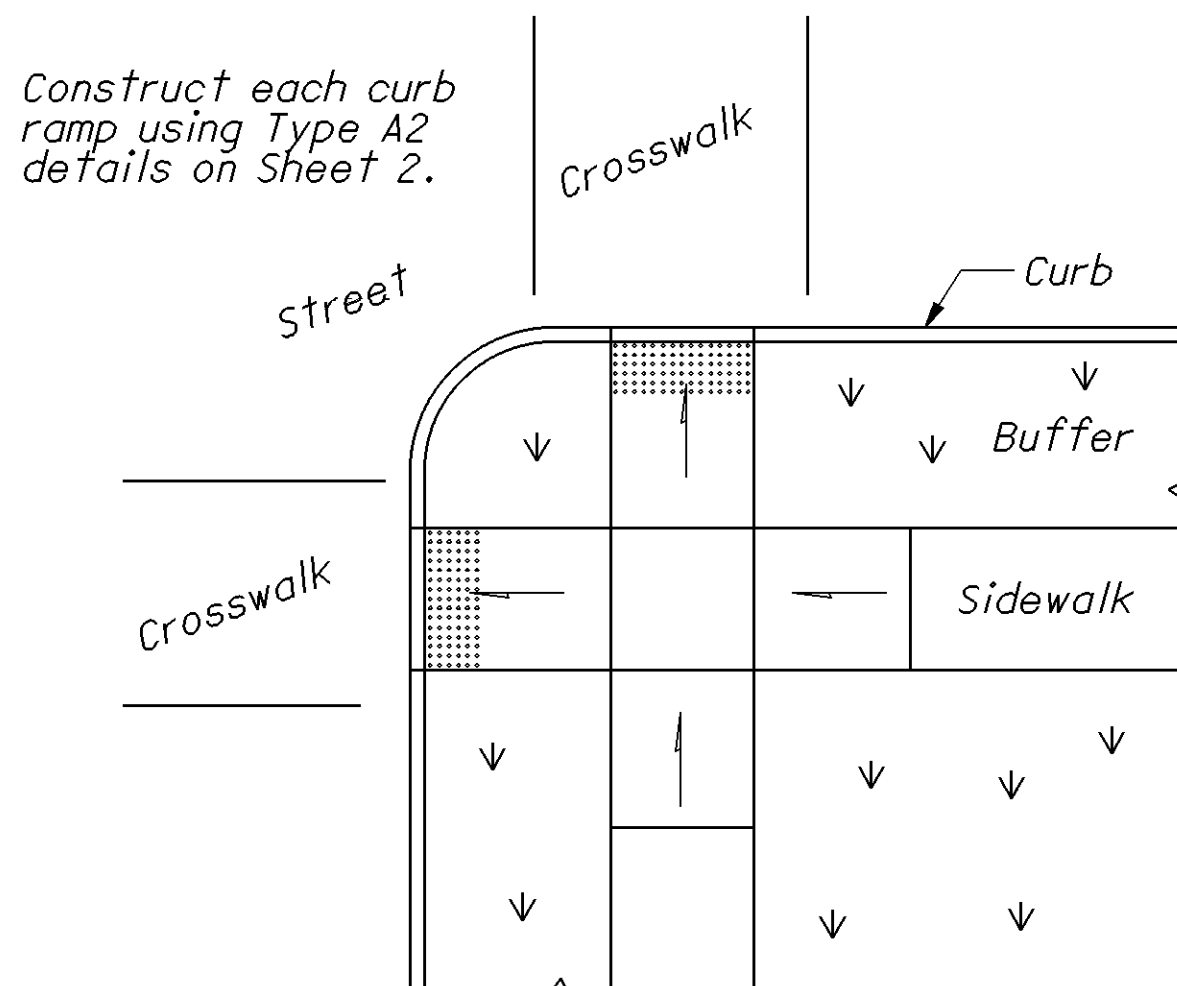
Place on streets having wide turning radius and where sidewalks are narrow.

### PARALLEL CURB RAMPS



Curb ramp placement where streets have wide turning radius, and sufficient sidewalks width.

### COMBINATION CURB RAMPS



### LEGEND

- 1 May be reduced to 3'-4" in existing sidewalks to better fit the walk configuration or where site conditions are restricted by narrow walks, pole foundations, drainage inlets, etc. The width may be tapered.

### NOTES

**GENERAL:** This drawing shows curb ramp types details and placement examples for curb ramp construction, including the installation of detectable warnings.

Curb ramp types are shown on Sheet 2 and include Perpendicular, Parallel, and Combined types as specified in the locations shown on the project plans.

Curb ramps added to an existing intersection or walk should be individually detailed on the project plans to assure that the design is appropriate for site constraints and all items can be constructed to ADA standards. The contractor may adjust the placement of curb ramps if existing field conditions warrant with the approval of the Engineer.

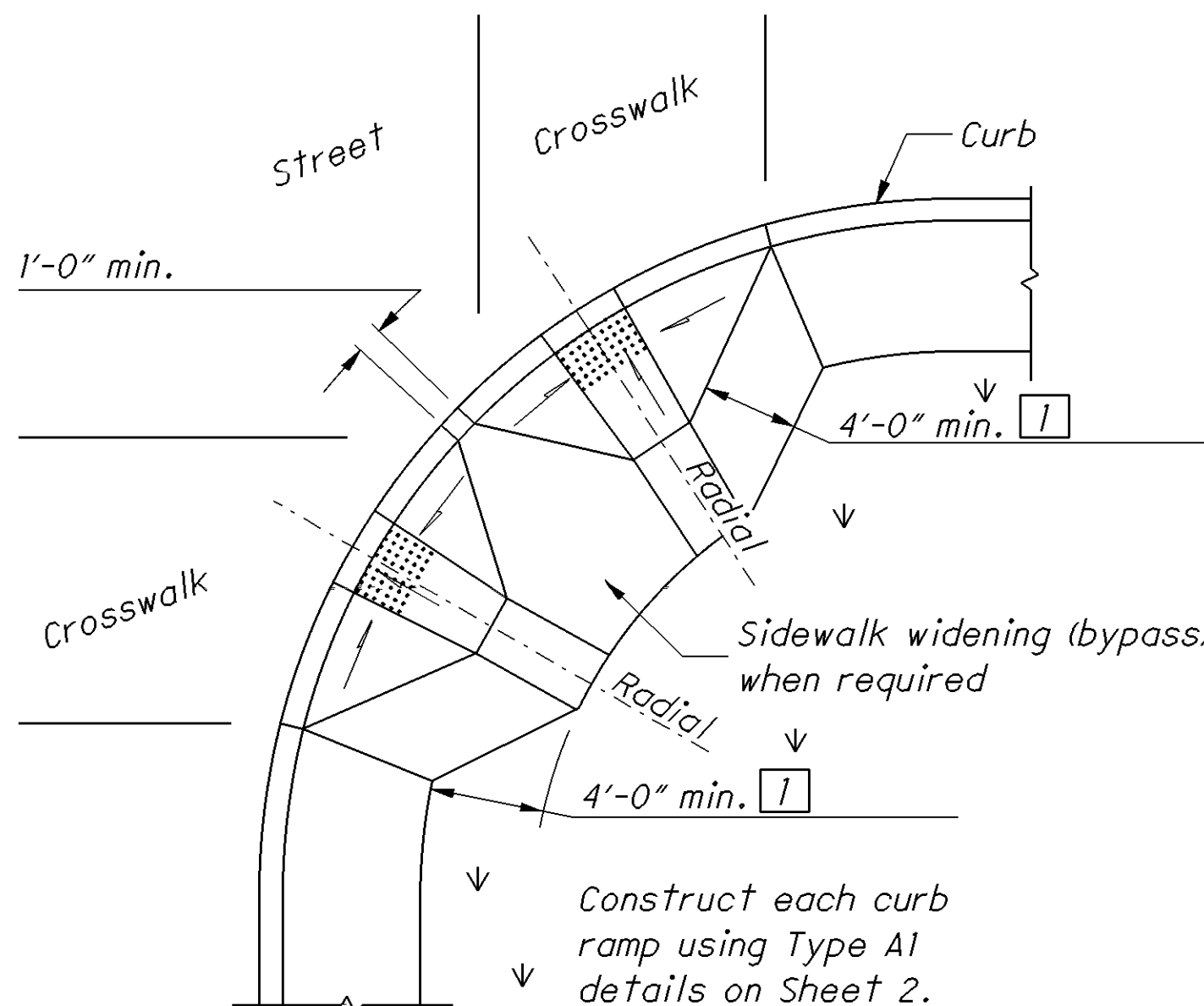
**METHOD OF MEASUREMENT:** The Department will measure Curb Ramps by the number of each completed curb ramp. The Department will measure Detectable Warnings in existing curb ramps and at grade crossings by the number of square feet completed.

Concrete Walk and Curb, Item 608 and 609, will be measured through out the curb ramp area and paid for under their respective Items.

**METHOD OF PAYMENT:** New Curb Ramps constructed in new or existing Walk are paid for under Item 690 Special Misc.: Curb Ramp, Type -- (A1, A2, B1, B2, B3, C1, C2, or D) each, and includes the cost of any additional materials and installation (including detectable warnings), grading, forming and finishing.

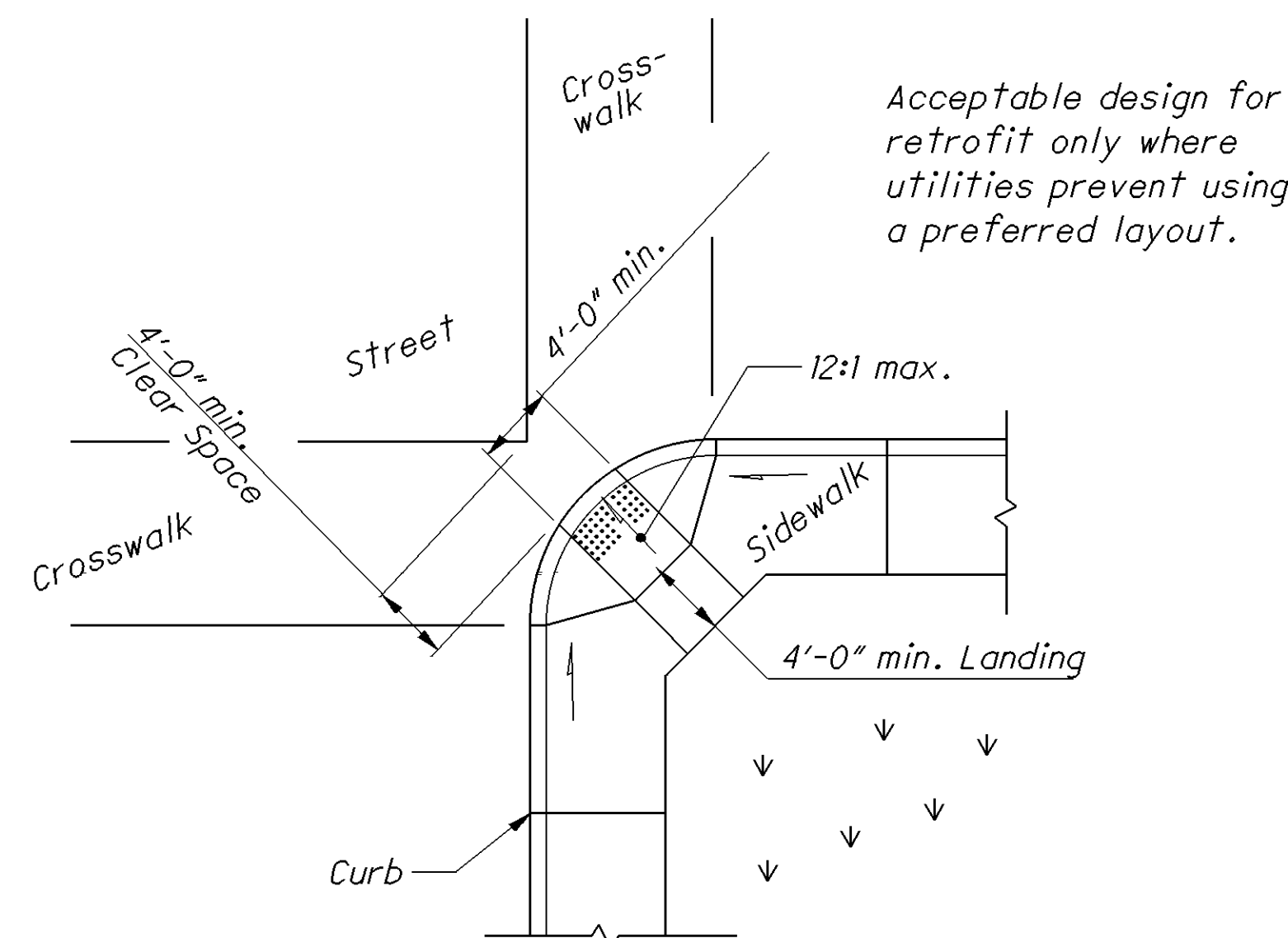
Detectable Warnings constructed in existing curb ramps or for at-grade crossing locations are paid for under Item 690-Special Misc.: Detectable Warning (Sq. Ft.) and is full compensation for excavation, backfill, base course material, reinforcing steel, expansion joint materials, and any incidentals required to complete the installation as specified. The work to cast the tiles in place will also require removal of existing pavement or sidewalk (Item 202) to the nearest joint, or if no joint exists, a minimum of 4 feet.

Removal of existing curb, pavement, walk (or existing curb ramps) are paid under Item 202.



Acceptable design on corners with wide turning radius where user is able to maneuver within crosswalk limits so as not to encroach into adjacent traveled lanes.

### PERPENDICULAR RAMPS



Use this design only for existing walks, and when site constraints prohibit other designs. The diagonal Type D ramp may be constructed as either a Perpendicular, Parallel or Combination curb ramp type. Avoid using where curb radii are less than 20'-0" .

### DIAGONAL RAMP (Type D)

### ACCEPTABLE CONSTRUCTION PLACEMENT

CALCULATED

CHECKED

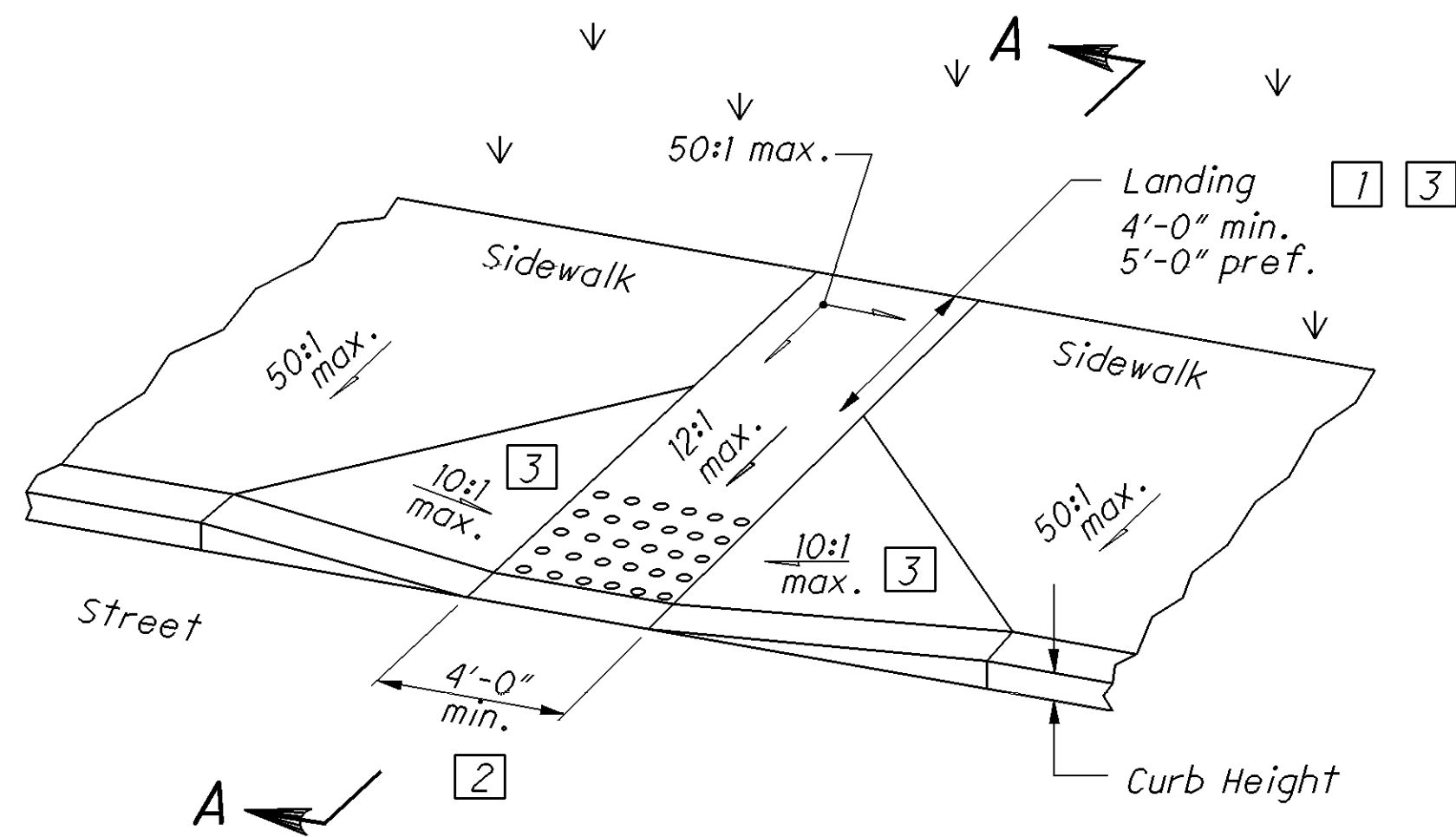
CURB RAMP AND DETECTABLE WARNING DETAILS

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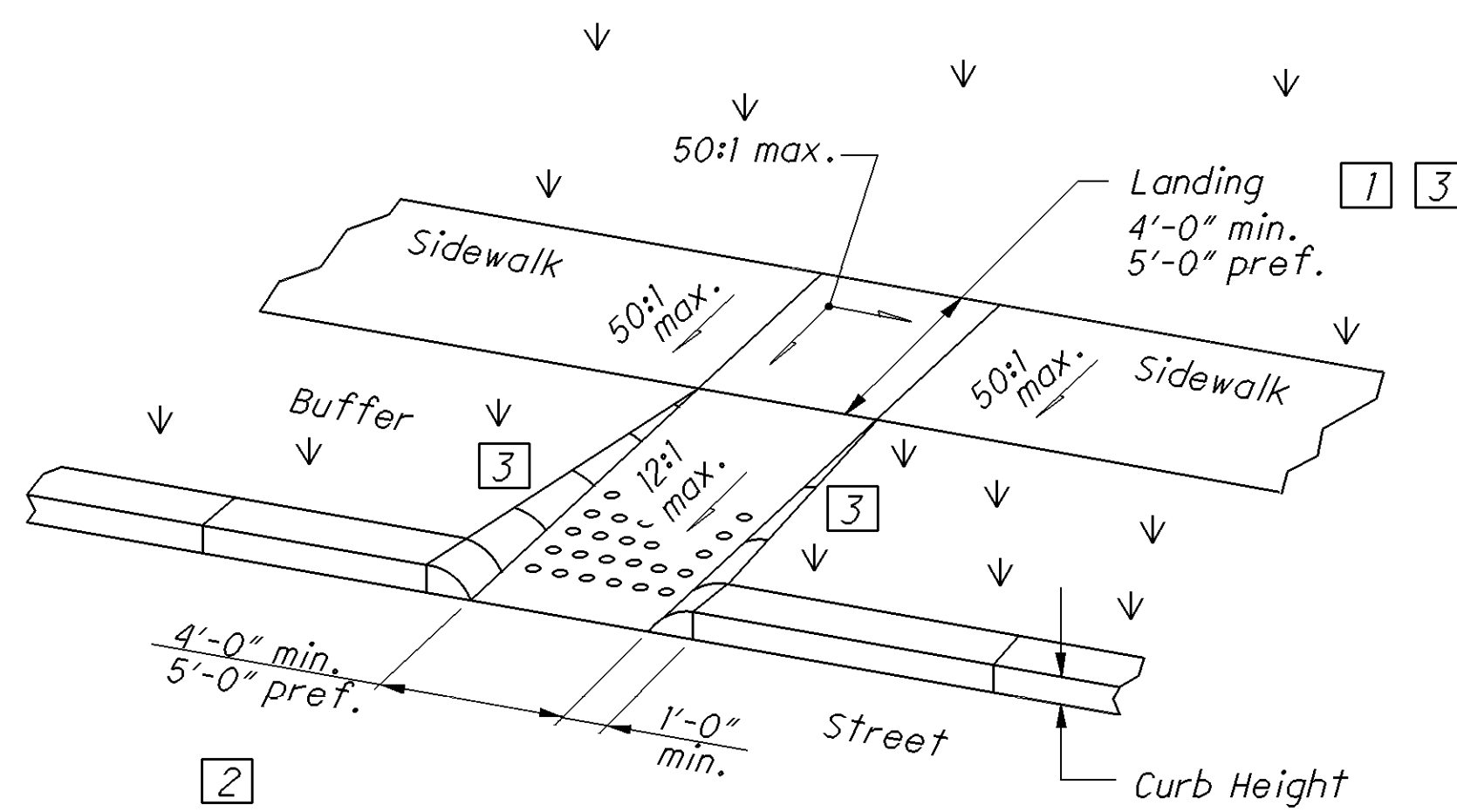
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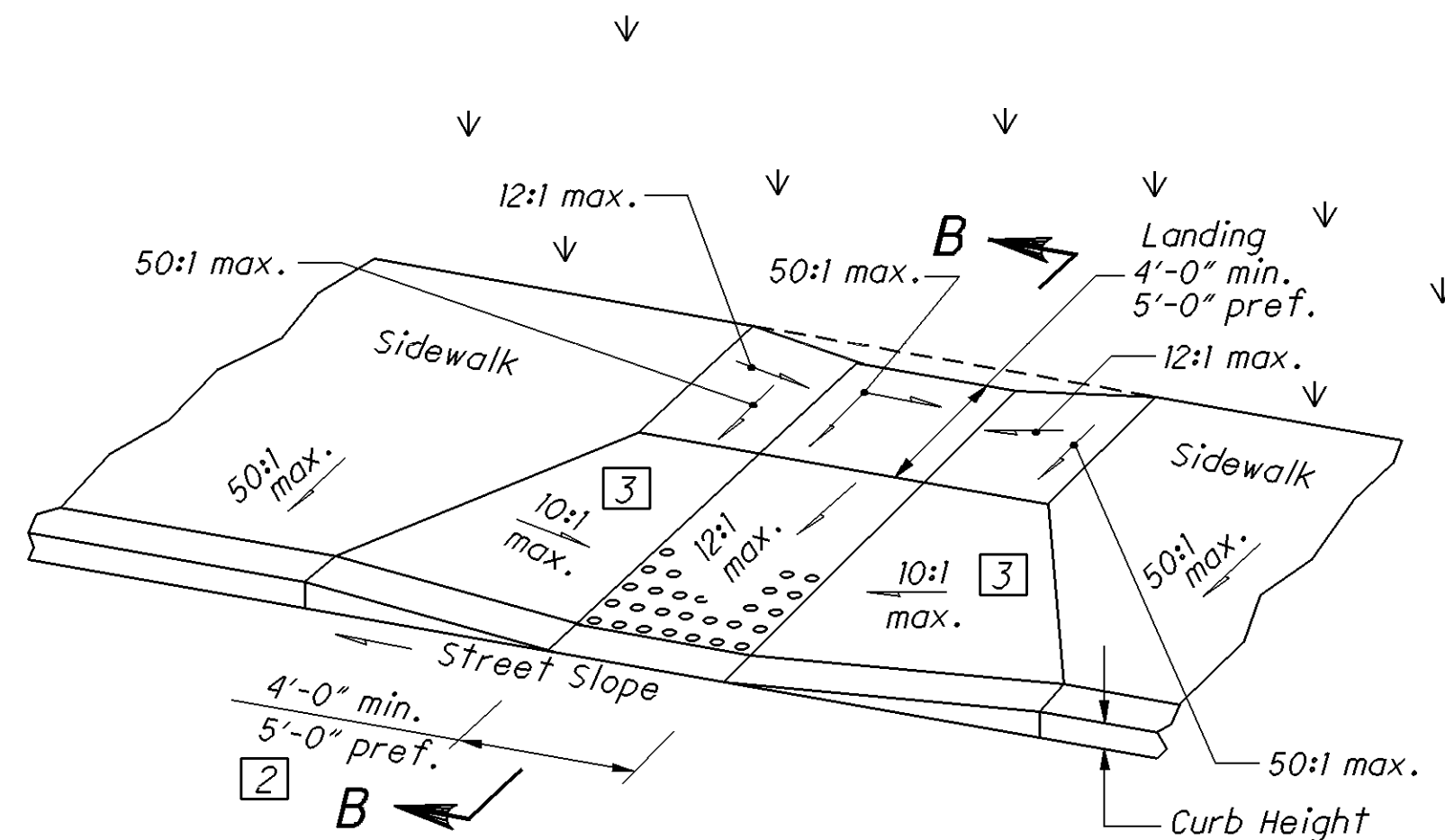


Type A1 (Perpendicular with flared sides)

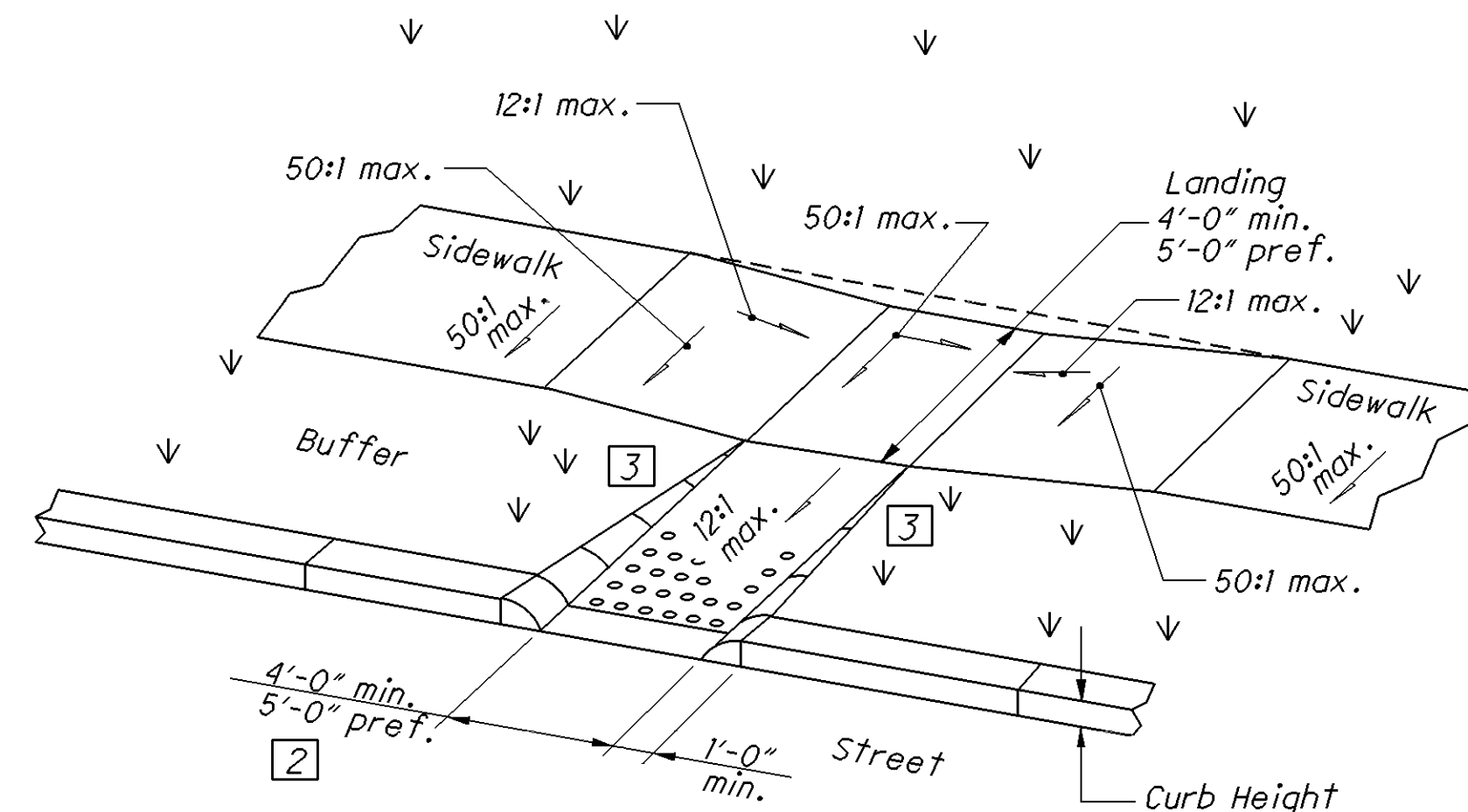


Type A2 (Perpendicular with returned curb)

### PERPENDICULAR CURB RAMP DETAILS

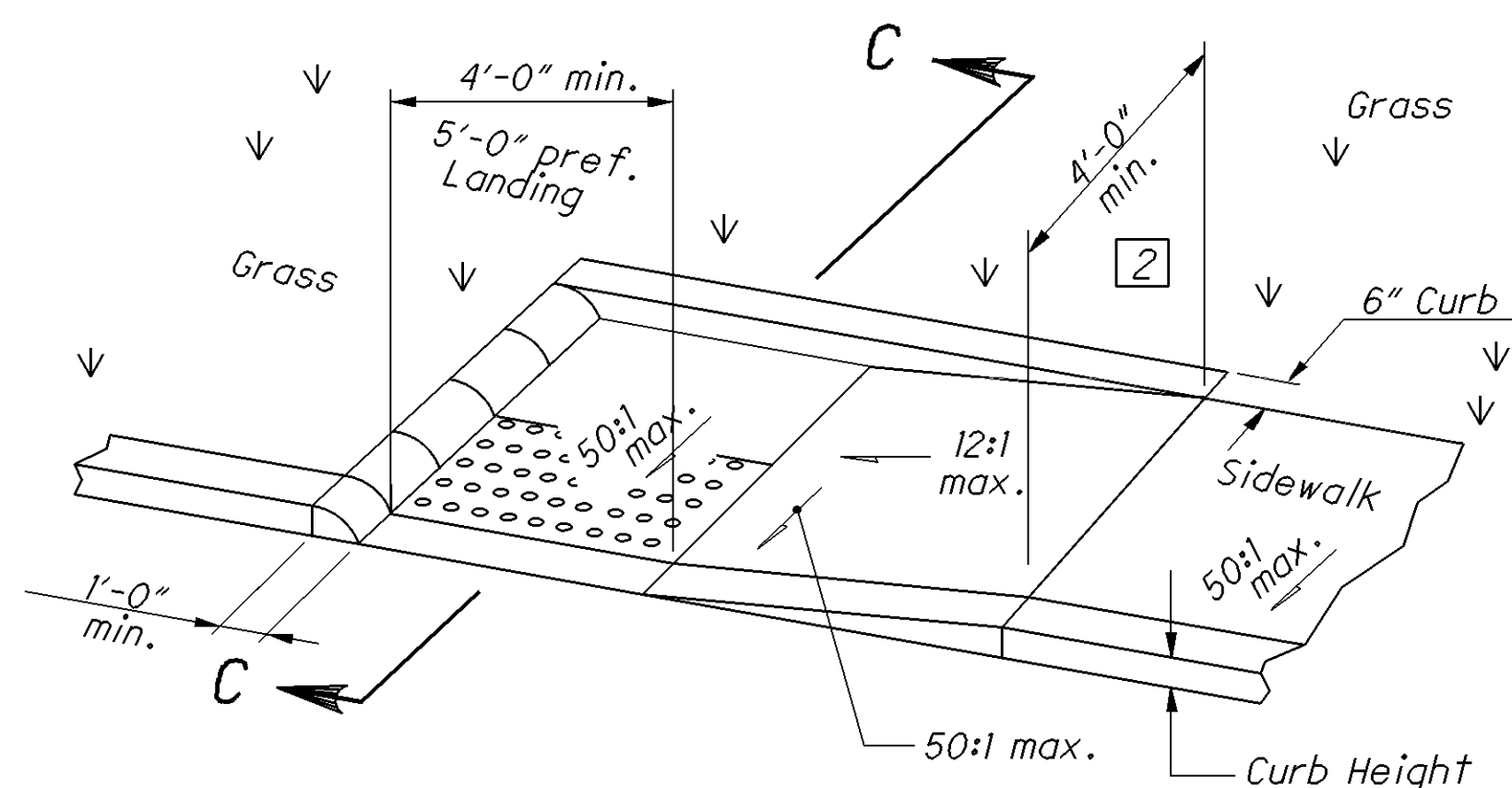


Type C1 (Combined with flared sides)

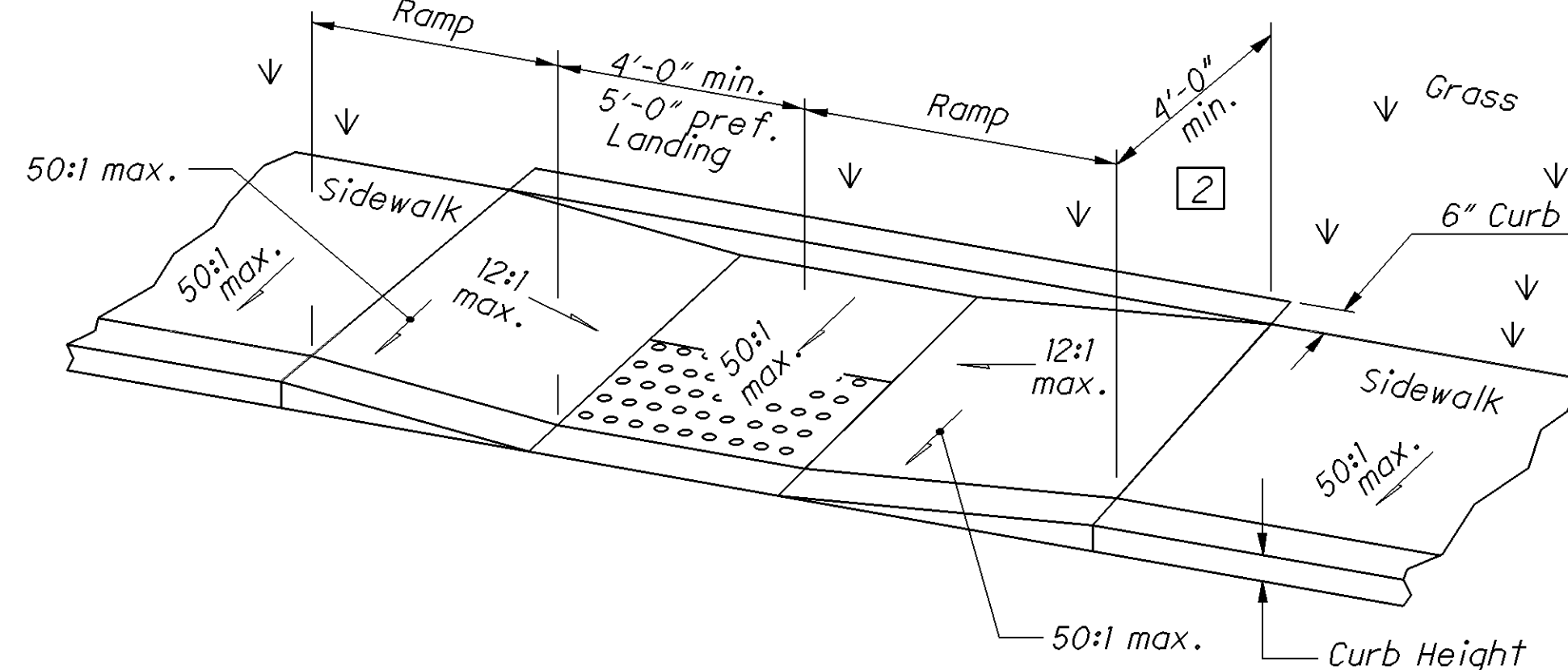


Type C2 (Combined with returned curb)

### COMBINED CURB RAMP DETAILS

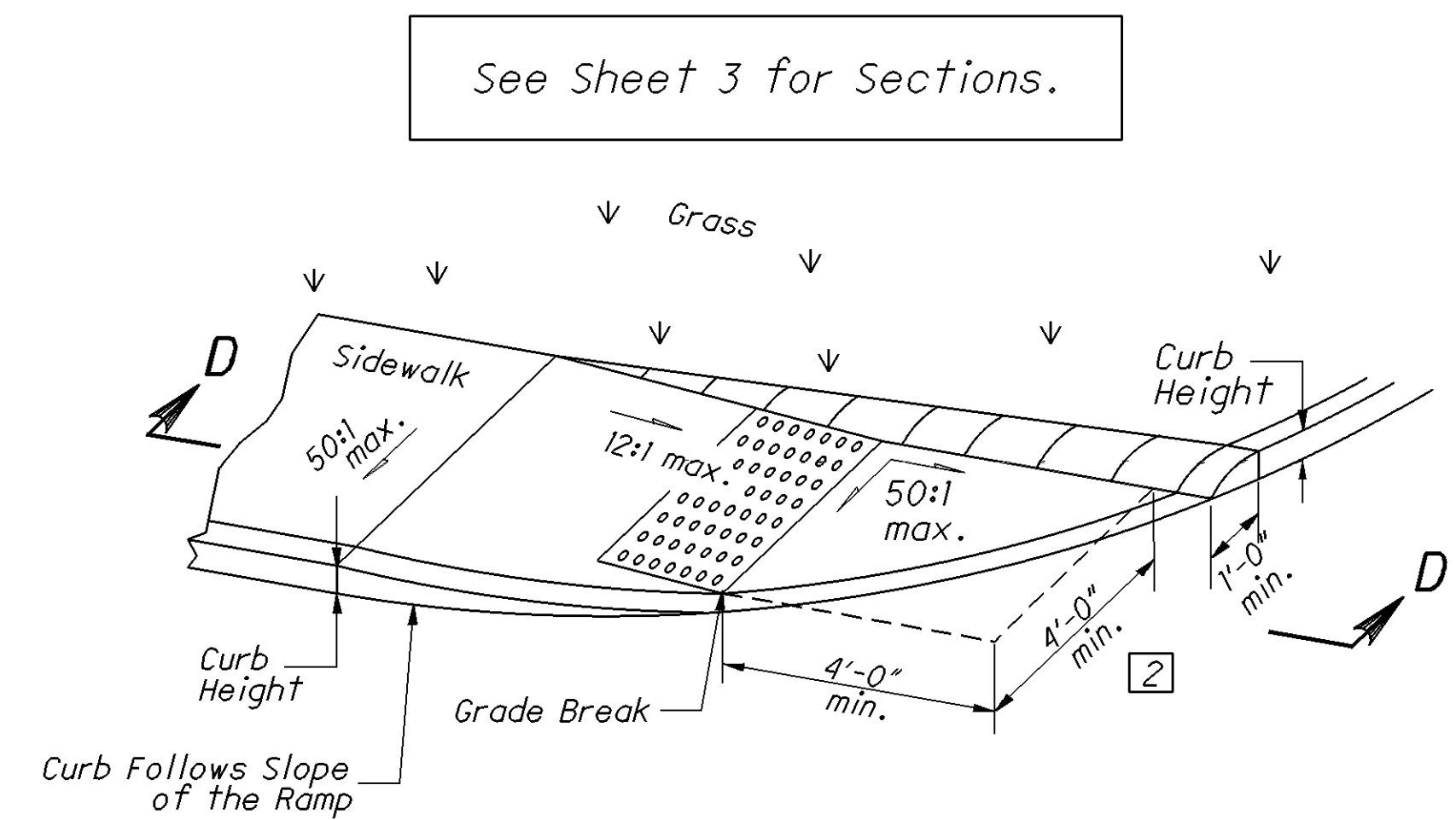


Type B1 (Single sided Parallel)



Type B2 (Double sided Parallel)

### PARALLEL CURB RAMP DETAILS



Type B3 (Single sided Parallel)

### NOTES CONTINUED

The running slope of the ramp is preferred to be 12:1 or flatter. In existing sidewalks, where the maximum ramp slope is not feasible due to site constraints (e.g. utility poles or vaults, right-of-way limits) it may be reduced as follows:

- A) 10:1 for a max. rise of 6",
- B) 8:1 for a max. rise of 3",
- C) 6:1 over a max. run of 2'-0" for historic areas where a flatter slope is not feasible.

To prevent chasing the grade indefinitely, the transition from existing sidewalk to the curb ramp area is not required to exceed 15 feet in length.

While ramps may be skewed to the crosswalk, the entire lower landing area must fall within the cross walk that the ramp serves and cannot be located in the traveled lane of opposing traffic.

The counter slope of the gutter or street at the foot of a curb ramp, landing, or blended transitions shall be 20:1 or flatter.

The bottom edge of the ramp shall change planes perpendicular to the landing.

The edge of the curb shall be flush with the edge of the adjacent pavement and gutter and surface slopes that meet grade breaks shall also be flush.

Ramp landings shall be 4' min. x 4' min. with a 50:1 or flatter cross slope and running slope, unless otherwise shown.

**DETECTABLE WARNINGS:** Install Detectable warnings on each curb reamp with approved materials as shown on Sheet 3. Install these proprietary products as per manufacturer's written instructions.

**DRAINAGE:** Contractor is to ensure the base of each constructed ramp allows for proper drainage, without exceeding allowable cross slope or ramp slope. Vertical change in level exceeding 1/8" between the 1) pavement and gutter, and 2) gutter and ramp, are not allowed.

**JOINTS:** Provide expansion joints in the curb ramp as extensions of walk joints and consistent with Item 608.03 requirements for a new concrete walk. Provide a 1/2" Item 705.03 expansion joint filler around the edge of ramps built in existing concrete walks. Lines shown on this drawing indicate the ramp edges and slope changes and do not necessarily indicate joint lines.

**SURFACE TEXTURE:** Texture concrete surfaces by coarse brooming transverse to the ramp slopes to be rougher than the adjacent walk.

### LEGEND

- [1] Dimension may be reduced to 3'-0" in existing sidewalks if the landing is unconstrained along the back edge.
- [2] May be reduced to 3'-4" in existing sidewalks to better fit the walk configuration or where site conditions are restricted by narrow walks, pole foundations, drainage inlets, etc. The width may be tapered.
- [3] Where landing width (D) has been reduced to 3'-0" the flared sides shall have a maximum slope of 12:1. Flared sides are not required where the edges of a curb ramp are protected by landscaping or other barriers to travel by wheelchair users or pedestrians across the edge of the curb ramp. However, if the flared sides are used in these areas, they may be of any slope.

See Sheet 3 for Sections.

CALCULATED

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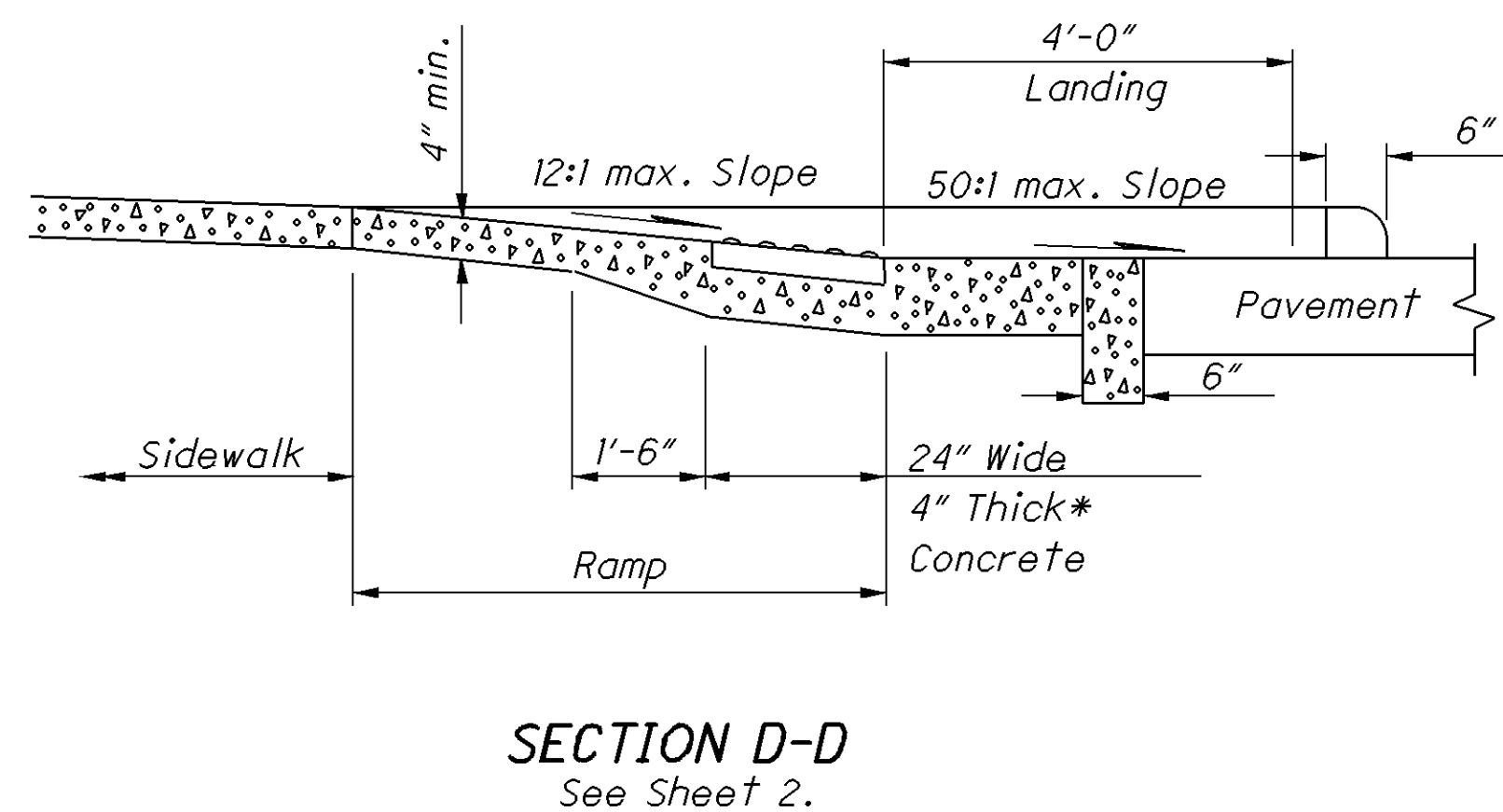
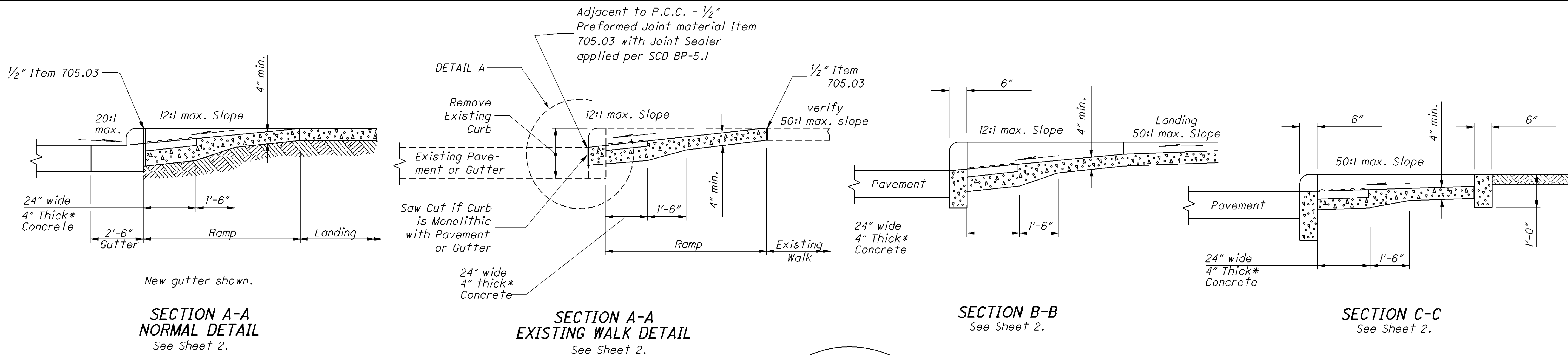
CURB RAMP AND DETECTABLE WARNING DETAILS

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\*Where possible, pour ramp area integral with the curb, otherwise use 6" thick walk.

### DETECTABLE WARNINGS NOTES

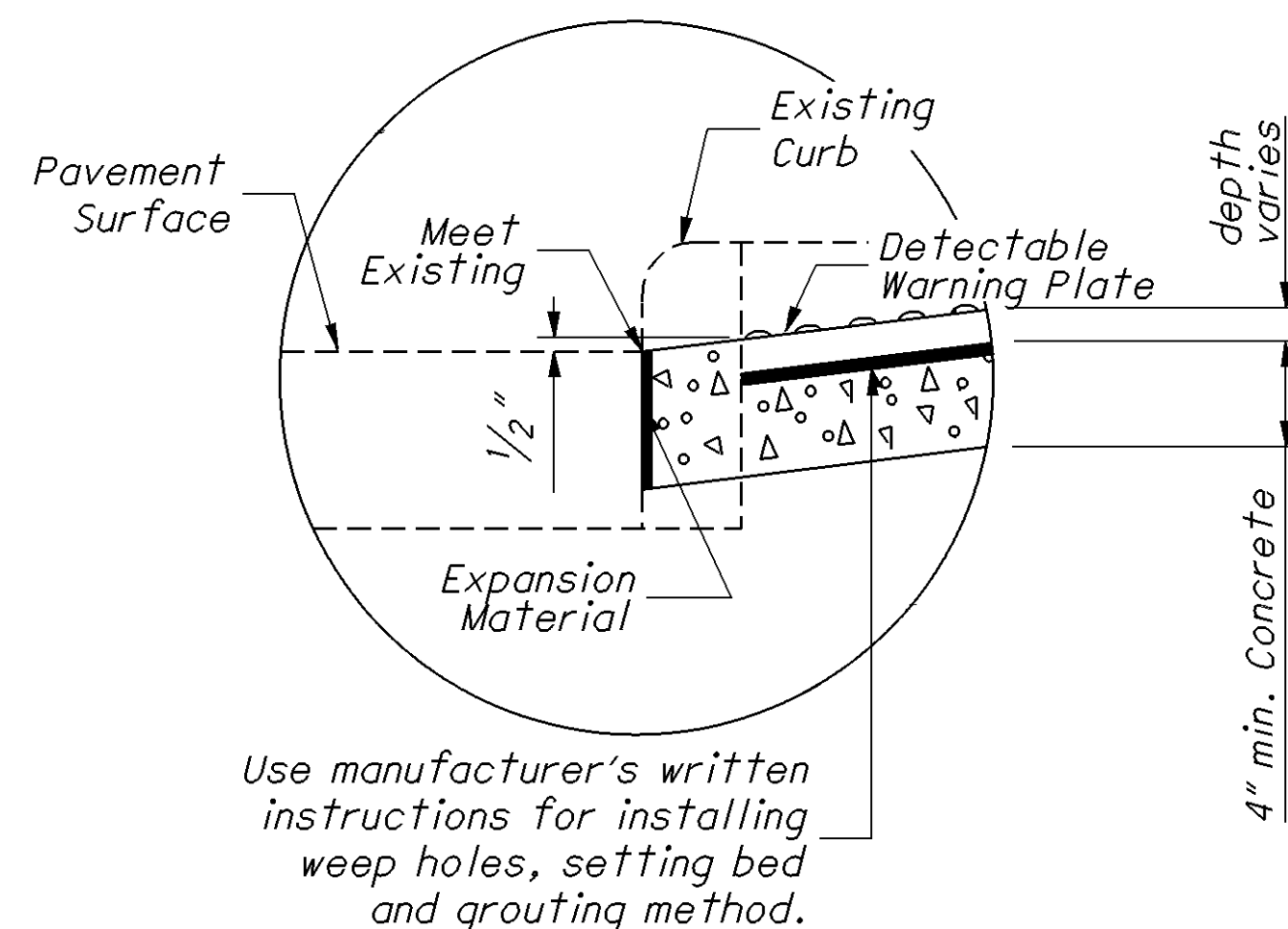
**GENERAL:** Detectable Warnings are a distinctive surface pattern of truncated domes which are detectable by cane or underfoot to alert people with vision impairments of their approach to streets and hazardous drop-offs.

**PLACEMENT:** Detectable warnings are to be installed at any location where pedestrians might cross paths with vehicular traffic lanes, such as the base of curb ramps or at blended curbs. A 24" strip of domes is to be installed for the full width of the ramp or walk. Typical street corner placement locations are shown on Sheet 2.

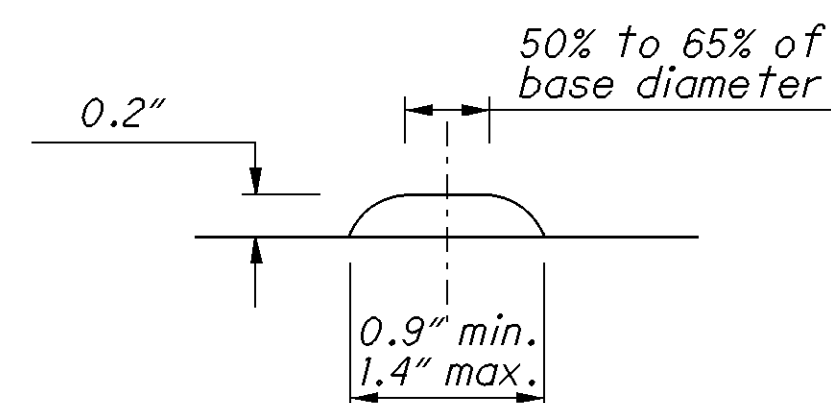
The depth of concrete underneath detectable warning products shall be a minimum of 4". See DETAIL A.

**ALIGNMENT:** Truncated domes should be aligned with the primary direction of the ramp as shown on the DETECTABLE WARNING ALIGNMENT Detail. Normally the detectable warnings should be flush with the back of the curb, but in skewed conditions see DETECTABLE WARNING ALIGNMENT DETAIL. For non-standard layouts, detectable warning materials may have to be mitered and placed segmentally.

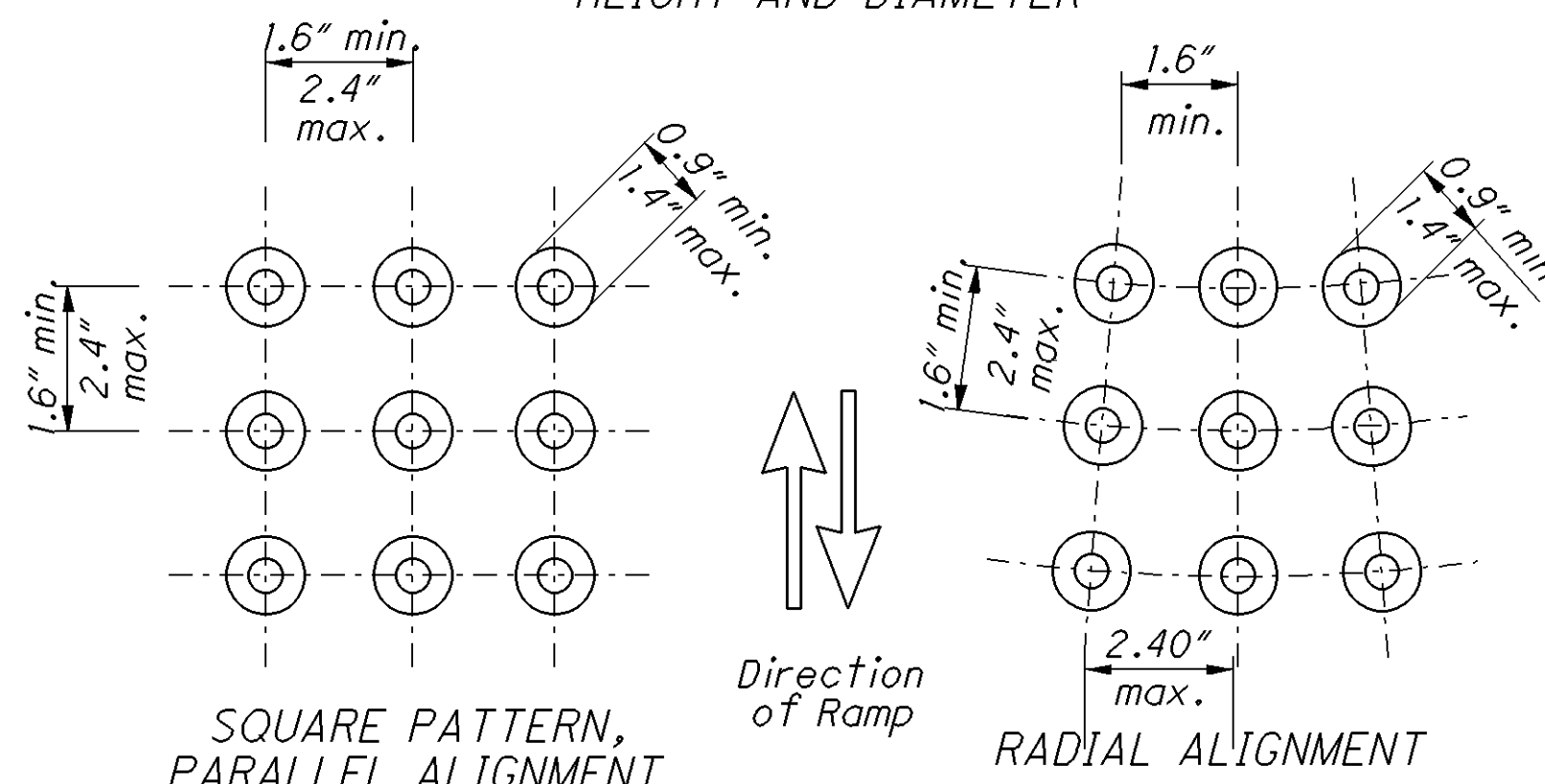
**PRODUCTS & COLORS:** Color of the detectable warnings should contrast with surrounding concrete walk and ramp. Black is not an acceptable color. Approved products and guidance on color may be found on the Office of Roadway Engineering Service's Detectable Warnings Approved List. Install products as per manufacturer's printed instructions.



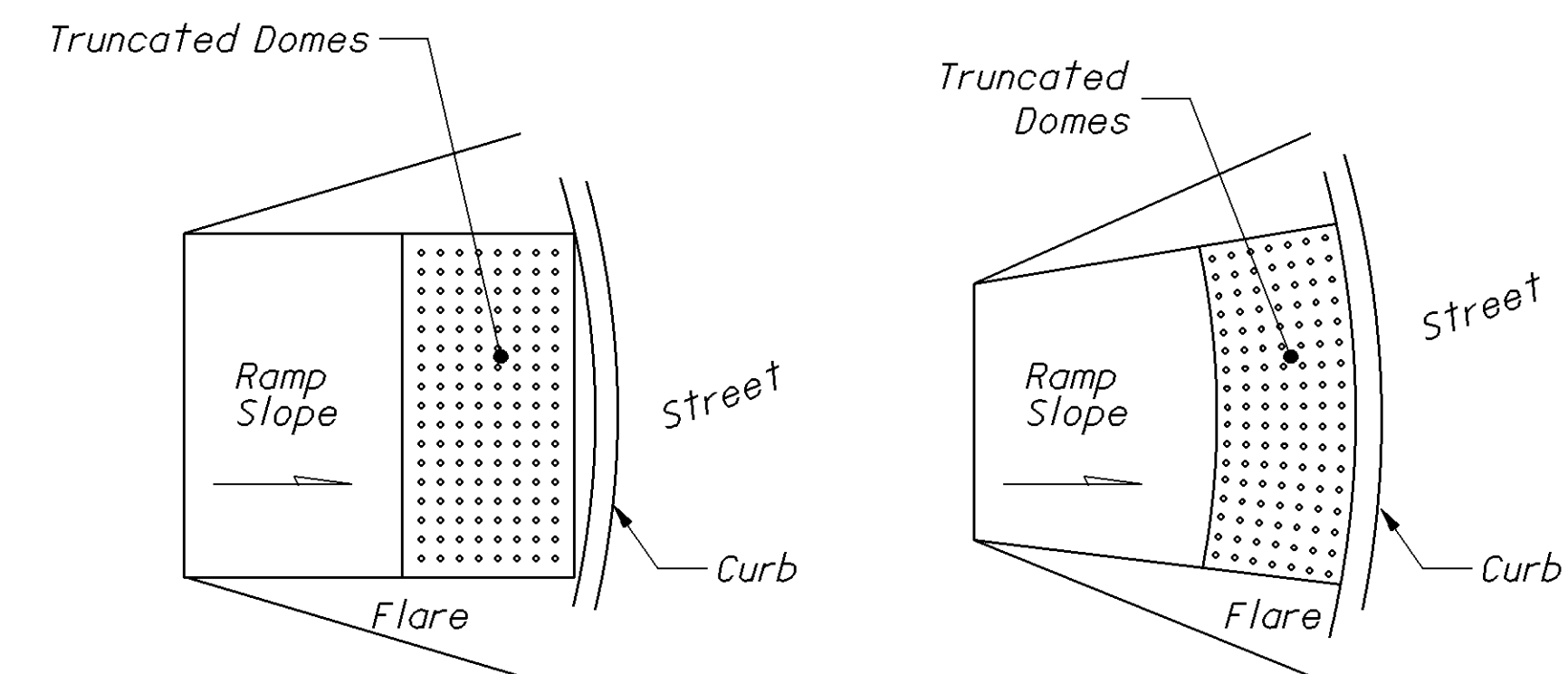
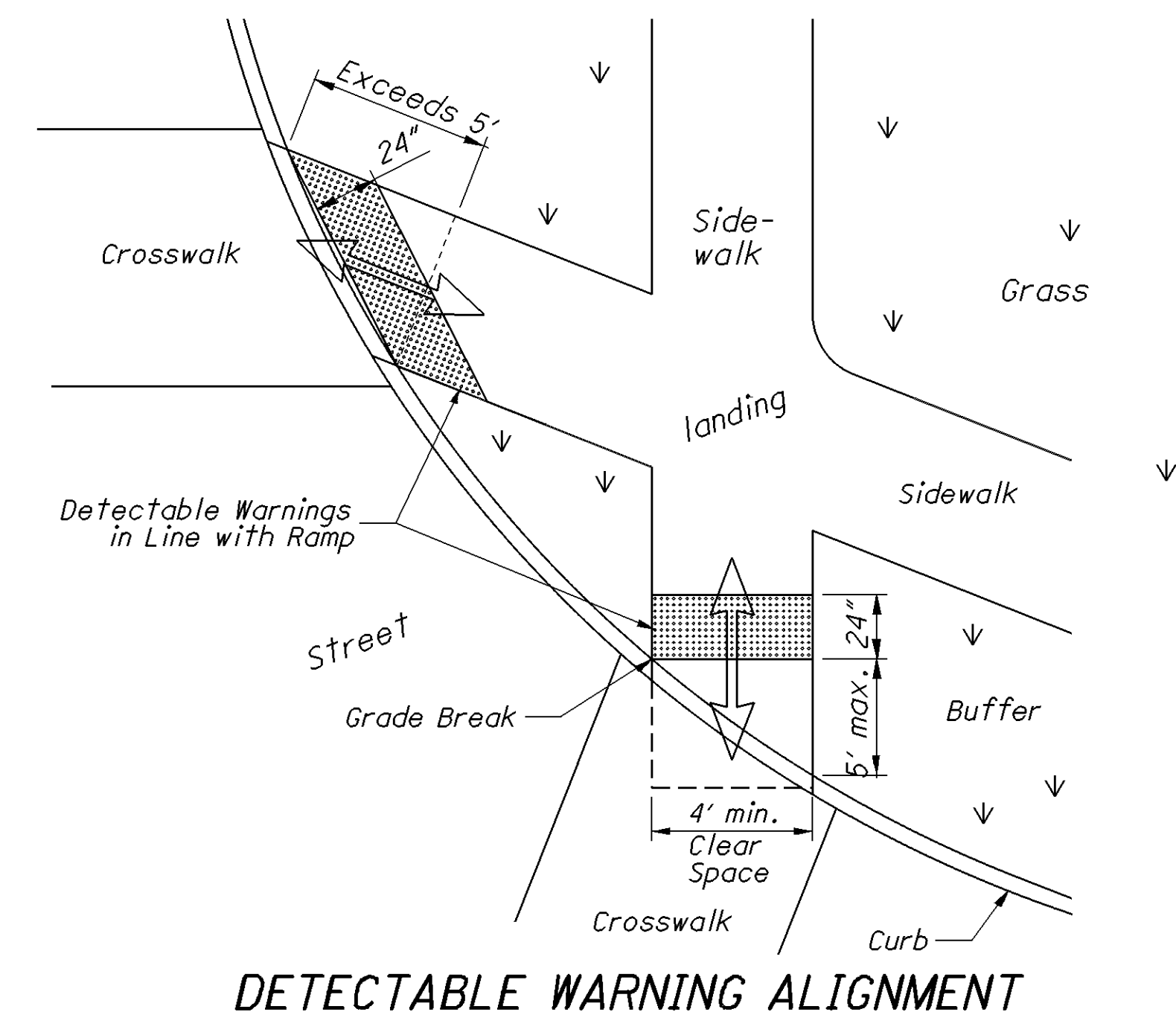
### DETAIL A



### HEIGHT AND DIAMETER



### TRUNCATED DOMES DETAILS



CALCULATED  
CHECKED

CURB RAMP AND DETECTABLE WARNING DETAILS

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GUE-209-0.00

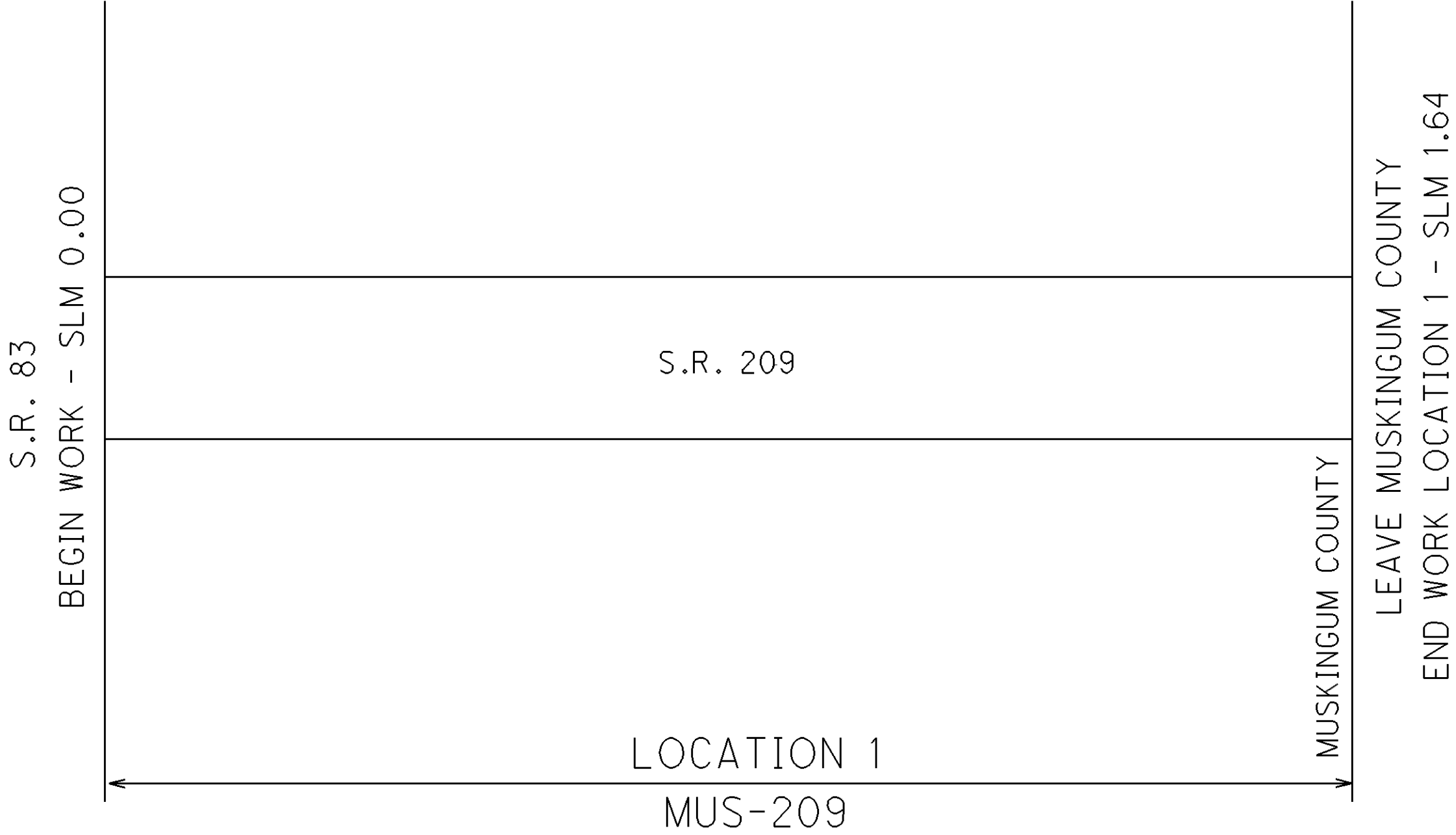
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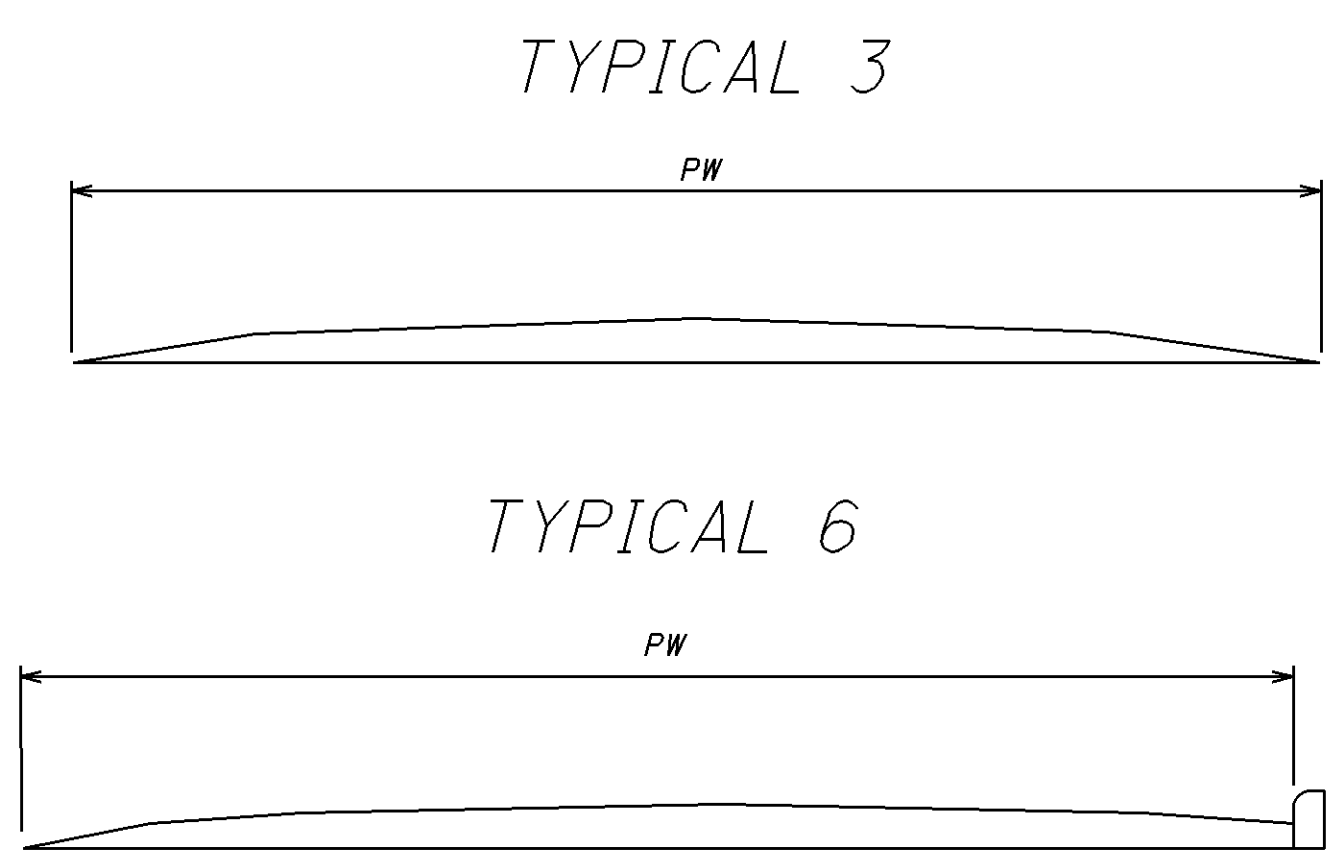
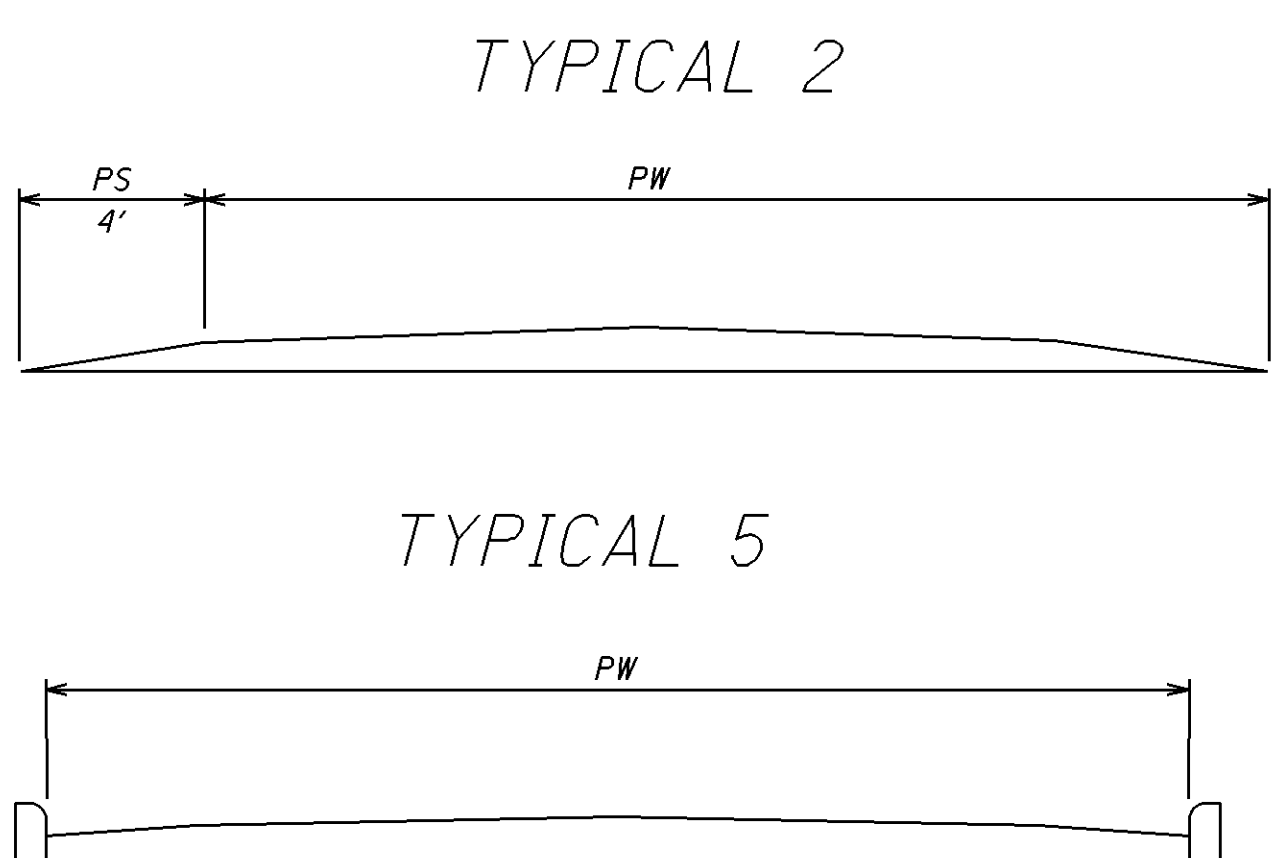
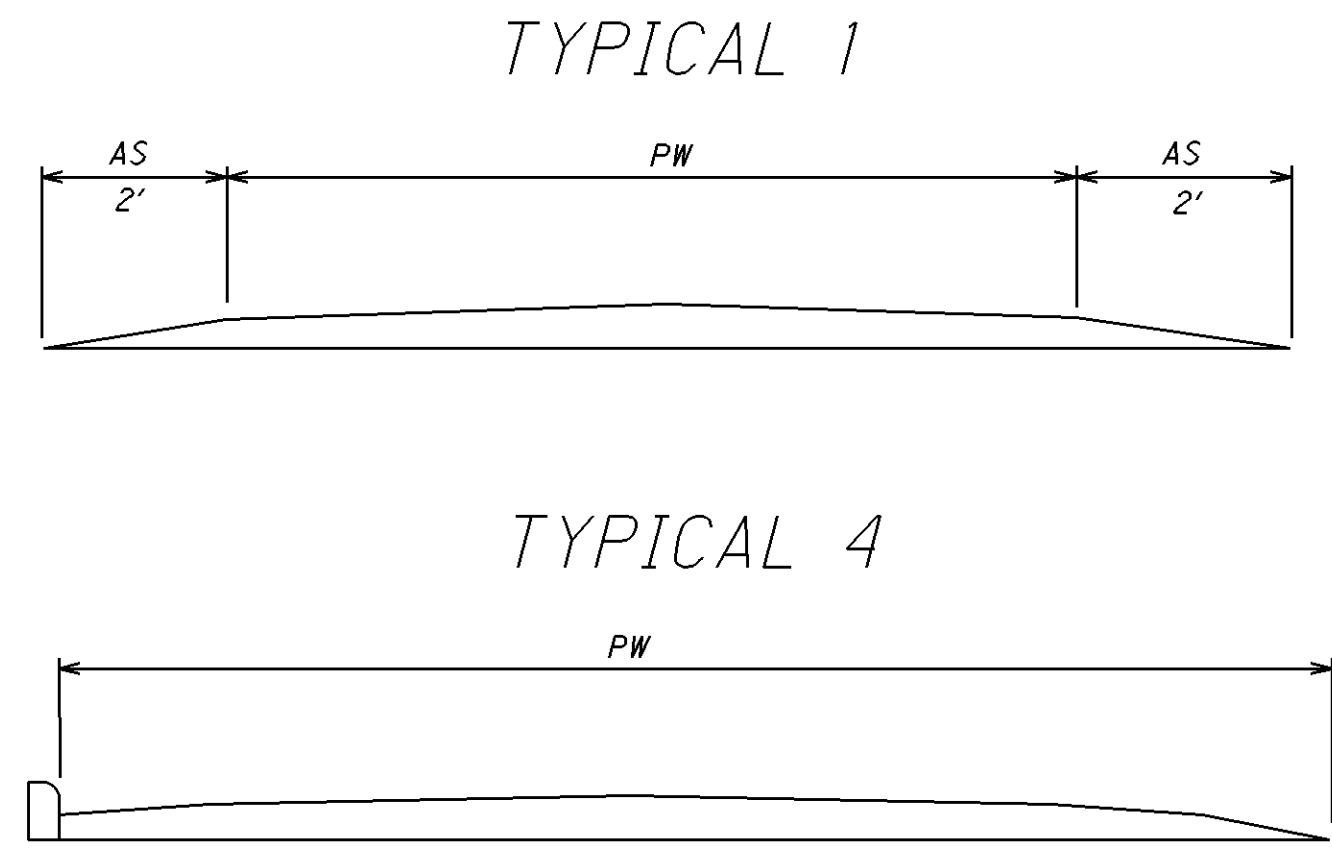
NOTE:

THE PAVEMENT WIDTHS SHOWN IN THE "PAVEMENT DATA" TABLE ON SHEET 12 ARE THE WIDTHS WHICH HAVE BEEN DETERMINED TO HAVE SUFFICIENT ROADWAY BASE FOR PAVING. IF THE ACTUAL ROADWAY WIDTH IS GREATER THAN WHAT THE PAVEMENT DATA SHEET SHOWS, THE CONTRACTOR SHALL PAVE ONLY THE WIDTH SHOWN IN THE AFOREMENTIONED TABLE, UNLESS THE WIDER PAVEMENT IS IN A CURVED ROADWAY SECTION. DO NOT REDUCE THE WIDTH OF WIDENED PAVEMENT IN CURVED ROADWAY SECTIONS. PAVING SHALL BE CENTERED ABOUT THE FULL WIDTH OF THE ROADWAY AND ANY EXCESS EXISTING PAVEMENT ON THE EDGES SHALL BE COVERED WITH ITEM 617 COMPACTED AGGREGATE. PAVING IN CURBED ROADWAY SECTIONS SHALL BE FROM CURB TO CURB.



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| PAVEMENT DATA                              |                            |                       |                        |                      |         |          |                   |                                 |                  |           |                  |                                |                                                             |                                                   |                                                                                |                      |                                                |           |                                          |                                       |
|--------------------------------------------|----------------------------|-----------------------|------------------------|----------------------|---------|----------|-------------------|---------------------------------|------------------|-----------|------------------|--------------------------------|-------------------------------------------------------------|---------------------------------------------------|--------------------------------------------------------------------------------|----------------------|------------------------------------------------|-----------|------------------------------------------|---------------------------------------|
| L<br>O<br>C<br>A<br>T<br>I<br>O<br>N       | C<br>O<br>U<br>N<br>T<br>Y | R<br>O<br>U<br>T<br>E | BEGIN LOG<br>POINT SLM | END LOG<br>POINT SLM | LENGTH  |          | PAVEMENT<br>WIDTH | T<br>Y<br>P<br>I<br>C<br>A<br>L | PAVEMENT<br>AREA | 254       |                  | 407                            |                                                             |                                                   |                                                                                | 441 ASPHALT CONCRETE |                                                |           |                                          | 614                                   |
|                                            |                            |                       |                        |                      |         |          |                   |                                 |                  | THICKNESS | PAVEMENT PLANING | TACK COAT<br>@ 0.075 GAL./S.Y. | TACK COAT FOR<br>INTERMEDIATE<br>COURSE<br>@ 0.05 GAL./S.Y. | TACK COAT,<br>TRACKLESS TACK<br>@ 0.075 GAL./S.Y. | TACK COAT,<br>TRACKLESS TACK<br>FOR INTERMEDIATE<br>COURSE @ 0.05<br>GAL./S.Y. | THICKNESS            | SURFACE COURSE,<br>TYPE 1, (448),<br>PG 70-22M | THICKNESS | INTERMEDIATE<br>COURSE,<br>TYPE 1, (448) | WORK ZONE<br>CENTER LINE,<br>CLASS II |
|                                            |                            |                       |                        |                      | SQ. YD. | INCHES   |                   |                                 |                  |           |                  |                                |                                                             |                                                   |                                                                                |                      |                                                |           |                                          |                                       |
|                                            |                            |                       |                        |                      |         |          |                   |                                 |                  |           |                  |                                |                                                             |                                                   |                                                                                |                      |                                                |           |                                          |                                       |
| 1                                          | MUS                        | S.R. 209              | 0.00                   | 1.64                 | 1.64    | 8,659.2  | 20.0              | 1                               | 19,242.7         | 1.25      | 19,242.7         | 1,443.3                        | 962.2                                                       |                                                   |                                                                                | 1.25                 | 668.2                                          | 1.00      | 534.6                                    | 3.28                                  |
|                                            |                            |                       |                        |                      |         |          |                   |                                 |                  |           |                  |                                |                                                             |                                                   |                                                                                |                      |                                                |           |                                          |                                       |
| LOCATION 1 TOTALS (CARRIED TO SUB-SUMMARY) |                            |                       |                        |                      |         |          |                   |                                 |                  |           | 19,242.7         | 1,443.3                        | 962.2                                                       |                                                   |                                                                                |                      | 668.2                                          |           | 534.6                                    | 3.28                                  |
| 2                                          | GUE                        | S.R. 209              | 0.00                   | 5.54                 | 5.54    | 29,251.2 | 20.0              | 1                               | 65,002.7         | 1.25      | 65,002.7         | 4,875.3                        | 3,250.2                                                     |                                                   |                                                                                | 1.25                 | 2,257.1                                        | 1.00      | 1,805.7                                  | 11.08                                 |
|                                            |                            |                       |                        |                      |         |          |                   |                                 |                  |           |                  |                                |                                                             |                                                   |                                                                                |                      |                                                |           |                                          |                                       |
| LOCATION 2 TOTALS (CARRIED TO SUB-SUMMARY) |                            |                       |                        |                      |         |          |                   |                                 |                  |           | 65,002.7         | 4,875.3                        | 3,250.2                                                     |                                                   |                                                                                |                      | 2,257.1                                        |           | 1,805.7                                  | 11.08                                 |
|                                            |                            |                       |                        |                      |         |          |                   |                                 |                  |           |                  |                                |                                                             |                                                   |                                                                                |                      |                                                |           |                                          |                                       |
| 3                                          | GUE                        | S.R. 209              | 5.54                   | 7.07                 | 1.53    | 8,078.4  | 20.0              | 1                               | 17,952.0         | 1.25      | 17,952.0         |                                |                                                             | 1,346.4                                           | 897.6                                                                          | 1.25                 | 623.4                                          | 1.00      | 498.7                                    | 3.06                                  |
| BRIDGE DEDUCTIONS (SEE SHEET 16)           |                            |                       |                        |                      |         |          |                   |                                 | (606.8)          |           | (606.8)          |                                |                                                             | (45.5)                                            | (30.3)                                                                         | 1.25                 | (21.0)                                         | 1.00      | (16.9)                                   | (0.11)                                |
|                                            |                            |                       |                        |                      |         |          |                   |                                 |                  |           |                  |                                |                                                             |                                                   |                                                                                |                      |                                                |           |                                          |                                       |
| LOCATION 3 TOTALS (CARRIED TO SUB-SUMMARY) |                            |                       |                        |                      |         |          |                   |                                 |                  |           | 17,345.2         |                                |                                                             | 1,300.9                                           | 867.3                                                                          |                      | 602.4                                          |           | 481.8                                    | 2.95                                  |
|                                            |                            |                       |                        |                      |         |          |                   |                                 |                  |           |                  |                                |                                                             |                                                   |                                                                                |                      |                                                |           |                                          |                                       |
| 4                                          | GUE                        | S.R. 209              | 7.07                   | 7.44                 | 0.37    | 1,953.6  | 20.0              | 1                               | 4,341.4          | 1.25      | 4,341.4          |                                |                                                             |                                                   |                                                                                | 1.25                 | 150.8                                          | 1.00      | 120.6                                    | 0.74                                  |
|                                            |                            |                       | 7.44                   | 7.57                 | 0.13    | 686.4    | 22.0              | 2                               | 1,677.9          | 1.25      | 1,677.9          |                                |                                                             |                                                   |                                                                                | 1.25                 | 58.3                                           | 1.00      | 46.7                                     | 0.26                                  |
|                                            |                            |                       | 7.57                   | 7.64                 | 0.07    | 369.6    | 20.0              | 1                               | 821.4            | 1.25      | 821.4            |                                |                                                             |                                                   |                                                                                | 1.25                 | 28.6                                           | 1.00      | 22.9                                     | 0.14                                  |
| BRIDGE DEDUCTIONS (SEE SHEET 16)           |                            |                       |                        |                      |         |          |                   |                                 | (559.8)          |           | (559.8)          |                                |                                                             | (41.9)                                            | (27.9)                                                                         | 1.25                 | (19.4)                                         | 1.00      | (15.6)                                   | (0.09)                                |
|                                            |                            |                       |                        |                      |         |          |                   |                                 |                  |           |                  |                                |                                                             |                                                   |                                                                                |                      |                                                |           |                                          |                                       |
| LOCATION 4 TOTALS (CARRIED TO SUB-SUMMARY) |                            |                       |                        |                      |         |          |                   |                                 |                  |           | 6,280.9          |                                |                                                             | 471.4                                             | 314.2                                                                          |                      | 218.3                                          |           | 174.6                                    | 1.05                                  |
|                                            |                            |                       |                        |                      |         |          |                   |                                 |                  |           |                  |                                |                                                             |                                                   |                                                                                |                      |                                                |           |                                          |                                       |
| 5                                          | GUE                        | S.R. 209              | 7.64                   | 7.69                 | 0.05    | 264.0    | 30.0              | 3                               | 880.0            | 2.25      | 880.0            |                                |                                                             |                                                   |                                                                                | 1.25                 | 30.6                                           | 1.00      | 24.5                                     | 0.10                                  |
|                                            |                            |                       | 7.69                   | 7.72                 | 0.03    | 158.4    | 30.0              | 4                               | 528.0            | 2.25      | 528.0            |                                |                                                             |                                                   |                                                                                | 1.25                 | 18.4                                           | 1.00      | 14.7                                     | 0.06                                  |
|                                            |                            |                       | 7.72                   | 7.85                 | 0.13    | 686.4    | 30.0              | 5                               | 2,288.0          | 2.25      | 2,288.0          |                                |                                                             |                                                   |                                                                                | 1.25                 | 79.5                                           | 1.00      | 63.6                                     | 0.26                                  |
|                                            |                            |                       | 7.85                   | 7.90                 | 0.05    | 264.0    | 30.0              | 3                               | 880.0            | 2.25      | 880.0            |                                |                                                             |                                                   |                                                                                | 1.25                 | 30.6                                           | 1.00      | 24.5                                     | 0.10                                  |
|                                            |                            |                       | 7.90                   | 7.95                 | 0.05    | 264.0    | 30.0              | 6                               | 880.0            | 2.25      | 880.0            |                                |                                                             |                                                   |                                                                                | 1.25                 | 30.6                                           | 1.00      | 24.5                                     | 0.10                                  |
|                                            |                            |                       | 7.95                   | 8.02                 | 0.07    | 369.6    | 30.0              | 3                               | 1,232.0          | 2.25      | 1,232.0          |                                |                                                             |                                                   |                                                                                | 1.25                 | 42.8                                           | 1.00      | 34.3                                     | 0.14                                  |
|                                            |                            |                       | 8.02                   | 8.11                 | 0.09    | 475.2    | 35.0              | 5                               | 1,848.0          | 2.25      | 1,848.0          |                                |                                                             |                                                   |                                                                                | 1.25                 | 64.2                                           | 1.00      | 51.4                                     | 0.18                                  |
|                                            |                            |                       |                        |                      |         |          |                   |                                 |                  |           |                  |                                |                                                             |                                                   |                                                                                |                      |                                                |           |                                          |                                       |
| LOCATION 5 TOTALS (CARRIED TO SUB-SUMMARY) |                            |                       |                        |                      |         |          |                   |                                 |                  |           | 8,536.0          |                                |                                                             | 640.2                                             | 426.8                                                                          |                      | 296.7                                          |           | 237.5                                    | 0.94                                  |



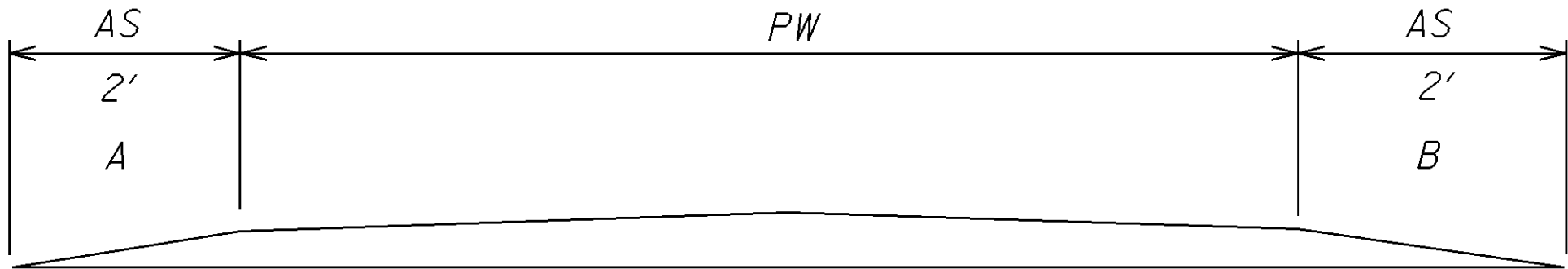
PW = PAVEMENT WIDTH  
PS = PAVED SHOULDER  
AS = AGGREGATE SHOULDER

SEE PREVIOUS SHEET FOR  
STRAIGHT LINE DIAGRAM

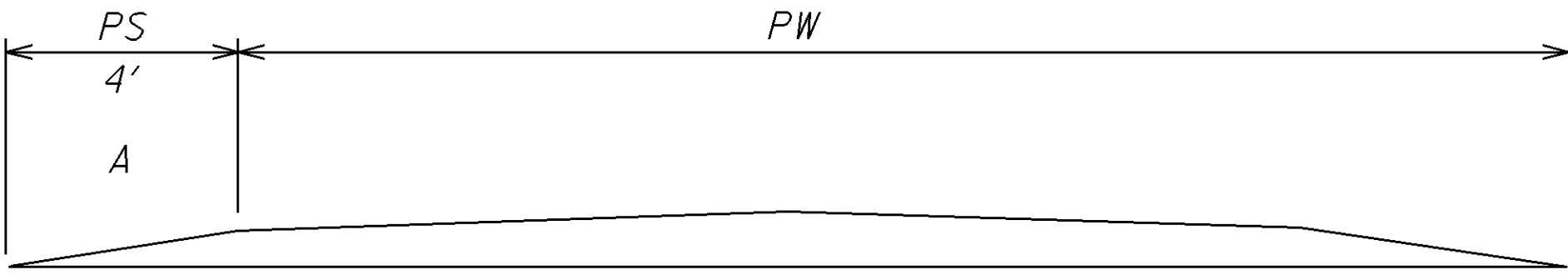
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| SHOULDER DATA                              |                            |                       |                           |                      |        |          |                                 |                         |   |                  |                                                           |           |                  |                                                   |                                                                             |                               |                      |                                                |           |                                       |                                                               |       |
|--------------------------------------------|----------------------------|-----------------------|---------------------------|----------------------|--------|----------|---------------------------------|-------------------------|---|------------------|-----------------------------------------------------------|-----------|------------------|---------------------------------------------------|-----------------------------------------------------------------------------|-------------------------------|----------------------|------------------------------------------------|-----------|---------------------------------------|---------------------------------------------------------------|-------|
| L<br>O<br>C<br>A<br>T<br>I<br>O<br>N       | C<br>O<br>U<br>N<br>T<br>Y | R<br>O<br>U<br>T<br>E | BEGIN<br>LOG POINT<br>SLM | END LOG<br>POINT SLM | LENGTH |          | T<br>Y<br>P<br>I<br>C<br>A<br>L | PROPOSED WIDTH<br>(FT.) |   | SHOULDER<br>AREA | 209                                                       | 252       |                  | 407                                               |                                                                             | 408                           | 441 ASPHALT CONCRETE |                                                |           |                                       | 617                                                           |       |
|                                            |                            |                       |                           |                      |        |          |                                 |                         |   |                  | PREPARING SUBGRADE<br>FOR SHOULDER PAVING,<br>AS PER PLAN | THICKNESS | PAVEMENT PLANING | TACK COAT, TRACKLESS<br>TACK<br>@ 0.075 GAL./S.Y. | TACK COAT,<br>TRACKLESS TACK<br>FOR INTERMEDIATE<br>COURSE @ 0.05 GAL./S.Y. | PRIME COAT @ 0.4<br>GAL./S.Y. | THICKNESS            | SURFACE COURSE,<br>TYPE 1, (448),<br>PG 70-22M | THICKNESS | INTERMEDIATE COURSE,<br>TYPE 1, (448) | COMPACTED AGGREGATE,<br>AS PER PLAN<br>(AVG. THICKNESS 2.25") |       |
|                                            |                            |                       |                           |                      | MILES  | LIN. FT. |                                 | A                       | B |                  | SQ. YD.                                                   | MILE      | INCHES           | SQ. YD.                                           | GAL.                                                                        | GAL.                          | GAL.                 | INCHES                                         | CU. YD.   | INCHES                                | CU. YD.                                                       | WIDTH |
|                                            |                            |                       |                           |                      |        |          |                                 |                         |   |                  |                                                           |           |                  |                                                   |                                                                             |                               |                      |                                                |           |                                       |                                                               |       |
| 1                                          | MUS                        | S.R. 209              | 0.00                      | 1.64                 | 1.64   | 8,659.2  | 1                               | 2                       | 2 | 3,848.5          | 3.28                                                      |           |                  |                                                   |                                                                             | 1,539.4                       |                      |                                                |           | 2.0                                   | 240.6                                                         |       |
|                                            |                            |                       |                           |                      |        |          |                                 |                         |   |                  |                                                           |           |                  |                                                   |                                                                             |                               |                      |                                                |           |                                       |                                                               |       |
| LOCATION 1 TOTALS (CARRIED TO SUB-SUMMARY) |                            |                       |                           |                      |        |          |                                 |                         |   |                  | 3.28                                                      |           |                  |                                                   |                                                                             | 1,539.4                       |                      |                                                |           |                                       | 240.6                                                         |       |
|                                            |                            |                       |                           |                      |        |          |                                 |                         |   |                  |                                                           |           |                  |                                                   |                                                                             |                               |                      |                                                |           |                                       |                                                               |       |
| 2                                          | GUE                        | S.R. 209              | 0.00                      | 5.54                 | 5.54   | 29,251.2 | 1                               | 2                       | 2 | 13,000.5         | 11.08                                                     |           |                  |                                                   |                                                                             | 5,200.2                       |                      |                                                |           | 2.0                                   | 812.6                                                         |       |
|                                            |                            |                       |                           |                      |        |          |                                 |                         |   |                  |                                                           |           |                  |                                                   |                                                                             |                               |                      |                                                |           |                                       |                                                               |       |
| LOCATION 2 TOTALS (CARRIED TO SUB-SUMMARY) |                            |                       |                           |                      |        |          |                                 |                         |   |                  | 11.08                                                     |           |                  |                                                   |                                                                             | 5,200.2                       |                      |                                                |           |                                       | 812.6                                                         |       |
|                                            |                            |                       |                           |                      |        |          |                                 |                         |   |                  |                                                           |           |                  |                                                   |                                                                             |                               |                      |                                                |           |                                       |                                                               |       |
| 3                                          | GUE                        | S.R. 209              | 5.54                      | 7.07                 | 1.53   | 8,078.4  | 1                               | 2                       | 2 | 3,590.4          | 3.06                                                      |           |                  |                                                   |                                                                             | 1,436.2                       |                      |                                                |           | 2.0                                   | 224.4                                                         |       |
| BRIDGE DEDUCTIONS (SEE SHEET 16)           |                            |                       |                           |                      |        | 273.0    |                                 | 2                       | 2 | (121.4)          | (0.11)                                                    |           |                  |                                                   |                                                                             | (48.6)                        |                      |                                                |           | 2.0                                   | (7.6)                                                         |       |
|                                            |                            |                       |                           |                      |        |          |                                 |                         |   |                  |                                                           |           |                  |                                                   |                                                                             |                               |                      |                                                |           |                                       |                                                               |       |
| LOCATION 3 TOTALS (CARRIED TO SUB-SUMMARY) |                            |                       |                           |                      |        |          |                                 |                         |   |                  | 2.95                                                      |           |                  |                                                   |                                                                             | 1,387.6                       |                      |                                                |           |                                       | 216.8                                                         |       |
|                                            |                            |                       |                           |                      |        |          |                                 |                         |   |                  |                                                           |           |                  |                                                   |                                                                             |                               |                      |                                                |           |                                       |                                                               |       |
| 4                                          | GUE                        | S.R. 209              | 7.07                      | 7.44                 | 0.37   | 1,953.6  | 1                               | 2                       | 2 | 868.3            | 0.74                                                      |           |                  |                                                   |                                                                             | 347.4                         |                      |                                                |           | 2.0                                   | 54.3                                                          |       |
|                                            |                            |                       | 7.44                      | 7.57                 | 0.13   | 686.4    | 2                               | 4                       | 0 | 305.1            | 0.26                                                      | 1.25      | 305.1            | 22.9                                              | 15.3                                                                        |                               | 1.3                  | 11.1                                           | 1.00      | 8.5                                   |                                                               |       |
|                                            |                            |                       | 7.57                      | 7.64                 | 0.07   | 369.6    | 1                               | 2                       | 2 | 164.3            | 0.14                                                      |           |                  |                                                   |                                                                             | 65.8                          |                      |                                                |           | 2.0                                   | 10.3                                                          |       |
| BRIDGE DEDUCTIONS (SEE SHEET 16)           |                            |                       |                           |                      |        | 229.0    |                                 | 2                       | 2 | (101.8)          | (0.09)                                                    |           |                  |                                                   |                                                                             | (40.8)                        |                      |                                                |           | 2.0                                   | (6.4)                                                         |       |
|                                            |                            |                       |                           |                      |        |          |                                 |                         |   |                  |                                                           |           |                  |                                                   |                                                                             |                               |                      |                                                |           |                                       |                                                               |       |
| LOCATION 4 TOTALS (CARRIED TO SUB-SUMMARY) |                            |                       |                           |                      |        |          |                                 |                         |   |                  | 1.05                                                      |           | 305.1            | 22.9                                              | 15.3                                                                        | 372.4                         |                      | 11.1                                           |           | 8.5                                   |                                                               | 58.2  |

TYPICAL 1

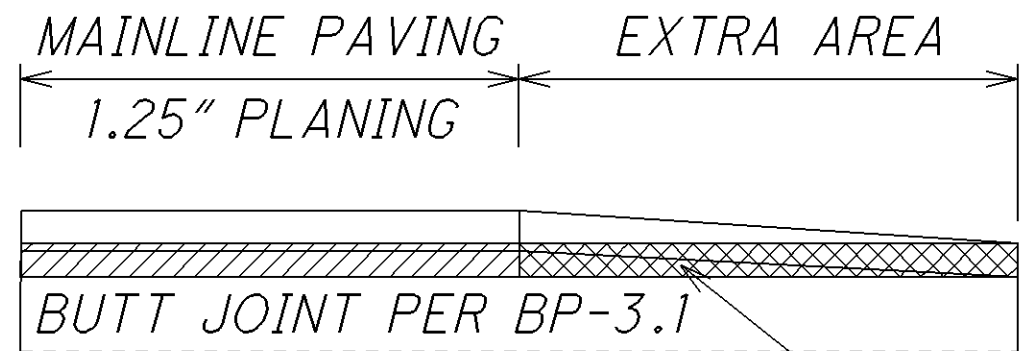
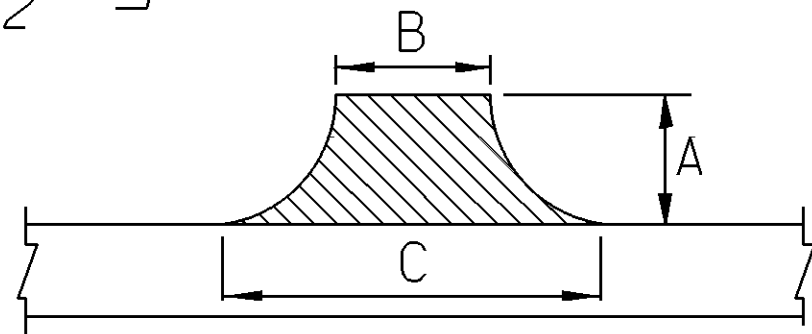


TYPICAL 2



PW = PAVEMENT WIDTH  
PS = PAVED SHOULDER  
AS = AGGREGATE SHOULDER

AREA = [A (B + C)] / 9



INTERMEDIATE COURSE  
TAPER

NOTES:

1. IN AREAS WHERE MAINLINE IS BEING PLANED 2.25", ONLY PLACE SURFACE COURSE IN EXTRA AREAS.
2. IN AREAS WHERE MAINLINE IS BEING PLANED 1.25", CREATE A BUTT JOINT PER BP-3.1 FOR EXTRA AREAS. INTERMEDIATE COURSE SHOULD BE PLACED WITH AN AVERAGE THICKNESS OF 1/2", TAPERING FROM 1.00" AT THE MAINLINE TO 0.00" AT THE END OF THE EXTRA AREA. SEE DETAIL PROVIDED.
3. FOR DETAILS 1 THROUGH 5, SEE SHEET 15.

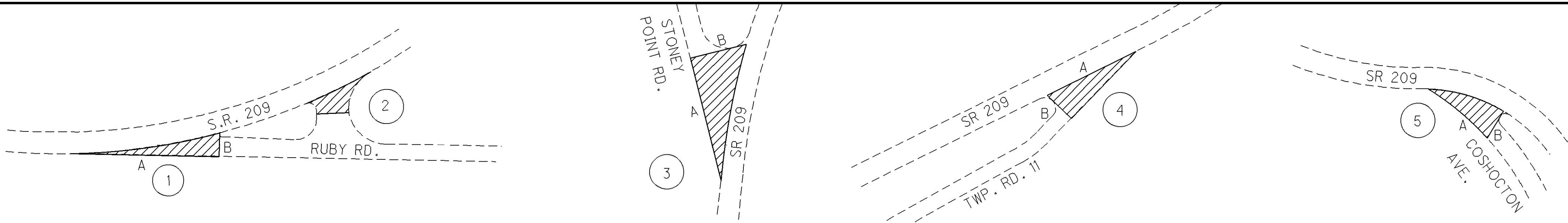
EXTRA AREAS

| LOCATION                                   | COUNTY | ROUTE    | SIDE | DESCRIPTION                            | INTERSECTIONS                               |     |     | AREA    | 202                       | 407                            |                                                             |                                                   |                                                                                | 441 ASPHALT CONCRETE |                                                |           |                                          |
|--------------------------------------------|--------|----------|------|----------------------------------------|---------------------------------------------|-----|-----|---------|---------------------------|--------------------------------|-------------------------------------------------------------|---------------------------------------------------|--------------------------------------------------------------------------------|----------------------|------------------------------------------------|-----------|------------------------------------------|
|                                            |        |          |      |                                        | DETAIL DIMENSION                            |     |     |         | WEARING COURSE<br>REMOVED | TACK COAT @<br>0.075 GAL./S.Y. | TACK COAT FOR<br>INTERMEDIATE<br>COURSE<br>@ 0.05 GAL./S.Y. | TACK COAT,<br>TRACKLESS TACK<br>@ 0.075 GAL./S.Y. | TACK COAT,<br>TRACKLESS TACK<br>FOR INTERMEDIATE<br>COURSE @ 0.05<br>GAL./S.Y. | THICKNESS            | SURFACE COURSE,<br>TYPE 1, (448),<br>PG 70-22M | THICKNESS | INTERMEDIATE<br>COURSE,<br>TYPE 1, (448) |
|                                            |        |          |      |                                        |                                             |     |     |         |                           |                                |                                                             |                                                   |                                                                                |                      |                                                |           |                                          |
|                                            |        |          |      |                                        | A                                           | B   | C   |         | SQ. YD.                   | SQ. YD.                        | GAL.                                                        | GAL.                                              | GAL.                                                                           | GAL.                 | IN.                                            | CU. YD.   | IN.                                      |
|                                            |        |          |      |                                        | FT.                                         | FT. | FT. | SQ. YD. | SQ. YD.                   | GAL.                           | GAL.                                                        | GAL.                                              | GAL.                                                                           | IN.                  | CU. YD.                                        | IN.       | CU. YD.                                  |
|                                            |        |          |      |                                        |                                             |     |     |         |                           |                                |                                                             |                                                   |                                                                                |                      |                                                |           |                                          |
| 1                                          | MUS    | S.R. 209 | CL   | AT SR 83                               | BUTT JOINT AT RECENT S.R. 83 PAVING PROJECT |     |     |         |                           |                                |                                                             |                                                   |                                                                                |                      |                                                |           |                                          |
|                                            |        |          | RT   | TWP RD 434 (RUBY RD) (DETAIL 1)        | 138                                         | 22  |     | 168.7   | 168.7                     | 12.7                           | 8.5                                                         |                                                   |                                                                                | 1.25                 | 5.9                                            | 0.50      | 2.4                                      |
|                                            |        |          | RT   | TWP RD 434 (RUBY RD) (DETAIL 2)        | 20                                          | 30  | 67  | 107.8   | 107.8                     | 8.1                            | 5.4                                                         |                                                   |                                                                                | 1.25                 | 3.8                                            | 0.50      | 1.5                                      |
|                                            |        |          | LT   | TWP RD 433 (STONE POINT RD) (DETAIL 3) | 117                                         | 54  |     | 351.0   | 351.0                     | 26.4                           | 17.6                                                        |                                                   |                                                                                | 1.25                 | 12.2                                           | 0.50      | 4.9                                      |
|                                            |        |          | LT   | TWP RD 53 (LOUANA RD)                  | 50                                          | 28  | 145 | 480.6   | 480.6                     | 36.1                           | 24.1                                                        |                                                   |                                                                                | 1.25                 | 16.7                                           | 0.50      | 6.7                                      |
|                                            |        |          |      |                                        |                                             |     |     |         |                           |                                |                                                             |                                                   |                                                                                |                      |                                                |           |                                          |
| LOCATION 1 TOTALS (CARRIED TO SUB-SUMMARY) |        |          |      |                                        |                                             |     |     |         | 1,108.1                   | 83.3                           | 55.6                                                        |                                                   |                                                                                |                      | 38.6                                           |           | 15.5                                     |
|                                            |        |          |      |                                        |                                             |     |     |         |                           |                                |                                                             |                                                   |                                                                                |                      |                                                |           |                                          |
| 2                                          | GUE    | S.R. 209 | RT   | TWP RD 11 (CABIN HILL RD) (DETAIL 4)   | 100                                         | 35  |     | 194.4   | 194.4                     | 14.6                           | 9.8                                                         |                                                   |                                                                                | 1.25                 | 6.8                                            | 0.50      | 2.7                                      |
|                                            |        |          | LT   | TWP RD 1627 (UNFURLING LN)             | 15                                          | 11  | 30  | 34.2    | 34.2                      | 2.6                            | 1.8                                                         |                                                   |                                                                                | 1.25                 | 1.2                                            | 0.50      | 0.5                                      |
|                                            |        |          | RT   | TWP RD 161 (CAMPFIRE RD)               | 20                                          | 25  | 65  | 100.0   | 100.0                     | 7.5                            | 5.0                                                         |                                                   |                                                                                | 1.25                 | 3.5                                            | 0.50      | 1.4                                      |
|                                            |        |          | LT   | SR 662                                 | 50                                          | 23  | 110 | 369.4   | 369.4                     | 27.8                           | 18.5                                                        |                                                   |                                                                                | 1.25                 | 12.9                                           | 0.50      | 5.2                                      |
|                                            |        |          | RT   | TWP RD 1624 (MATHEWS RD)               | 30                                          | 20  | 87  | 178.3   | 178.3                     | 13.4                           | 9.0                                                         |                                                   |                                                                                | 1.25                 | 6.2                                            | 0.50      | 2.5                                      |
|                                            |        |          | RT   | TWP RD 169 (LOVERS LANE)               | 28                                          | 20  | 82  | 158.7   | 158.7                     | 12.0                           | 8.0                                                         |                                                   |                                                                                | 1.25                 | 5.6                                            | 0.50      | 2.3                                      |
|                                            |        |          | RT   | CO RD 164 (BOBS RUN RD)                | 35                                          | 23  | 80  | 200.3   | 200.3                     | 15.1                           | 10.1                                                        |                                                   |                                                                                | 1.25                 | 7.0                                            | 0.50      | 2.8                                      |
|                                            |        |          | LT   | TWP RD 1650 (BOSTON LN)                | 25                                          | 20  | 50  | 97.2    | 97.2                      | 7.3                            | 4.9                                                         |                                                   |                                                                                | 1.25                 | 3.4                                            | 0.50      | 1.4                                      |
|                                            |        |          | RT   | TWP RD 615 (COLLEGE HILL RD)           | 40                                          | 18  | 70  | 195.6   | 195.6                     | 14.7                           | 9.8                                                         |                                                   |                                                                                | 1.25                 | 6.8                                            | 0.50      | 2.8                                      |
|                                            |        |          | LT   | TWP RD 166 (LAKE RD)                   | 30                                          | 24  | 94  | 196.7   | 196.7                     | 14.8                           | 9.9                                                         |                                                   |                                                                                | 1.25                 | 6.9                                            | 0.50      | 2.8                                      |
|                                            |        |          | RT   | TWP RD 1659 (ASHWOOD ACRES DR)         | 30                                          | 25  | 68  | 155.0   | 155.0                     | 11.7                           | 7.8                                                         |                                                   |                                                                                | 1.25                 | 5.4                                            | 0.50      | 2.2                                      |
|                                            |        |          | LT   | TWP RD 1664 (ANKER LN)                 | 25                                          | 20  | 67  | 120.8   | 120.8                     | 9.1                            | 6.1                                                         |                                                   |                                                                                | 1.25                 | 4.2                                            | 0.50      | 1.7                                      |
|                                            |        |          | LT   | TWP RD 1665 (PROUDFIT LN)              | 19                                          | 13  | 35  | 50.7    | 50.7                      | 3.9                            | 2.6                                                         |                                                   |                                                                                | 1.25                 | 1.8                                            | 0.50      | 0.8                                      |
|                                            |        |          | RT   | TWP RD 1685                            | 20                                          | 14  | 45  | 65.6    | 65.6                      | 5.0                            | 3.3                                                         |                                                   |                                                                                | 1.25                 | 2.3                                            | 0.50      | 1.0                                      |
|                                            |        |          |      |                                        |                                             |     |     |         |                           |                                |                                                             |                                                   |                                                                                |                      |                                                |           |                                          |
| LOCATION 2 TOTALS (CARRIED TO SUB-SUMMARY) |        |          |      |                                        |                                             |     |     |         | 2,116.9                   | 159.5                          | 106.6                                                       |                                                   |                                                                                |                      | 74.0                                           |           | 30.1                                     |

EXTRA AREA DATA

MUS-209-0.00  
GUE-209-0.00

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| EXTRA AREAS                                |                            |                       |                  |                                                     |                                                                         |     |     |                  |                                                                                                      |                                                              |                                                                                                                                                                      |                                                                                                                                |                                                                                                                                                                                                                                        |                                           |                                                                                                                        |                                           |                                                                                                                            |
|--------------------------------------------|----------------------------|-----------------------|------------------|-----------------------------------------------------|-------------------------------------------------------------------------|-----|-----|------------------|------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| L<br>O<br>C<br>A<br>T<br>I<br>O<br>N       | C<br>O<br>U<br>N<br>T<br>Y | R<br>O<br>U<br>T<br>E | S<br>I<br>D<br>E | D<br>E<br>S<br>C<br>R<br>I<br>P<br>T<br>I<br>O<br>N | I<br>N<br>T<br>E<br>R<br>S<br>E<br>C<br>T<br>I<br>O<br>N<br>S           |     |     | A<br>R<br>E<br>A | 202                                                                                                  | 407                                                          |                                                                                                                                                                      |                                                                                                                                |                                                                                                                                                                                                                                        | 441 ASPHALT CONCRETE                      |                                                                                                                        |                                           |                                                                                                                            |
|                                            |                            |                       |                  |                                                     | D<br>E<br>T<br>A<br>I<br>L<br>D<br>I<br>M<br>E<br>N<br>S<br>I<br>O<br>N |     |     |                  | W<br>E<br>A<br>R<br>I<br>N<br>G<br>C<br>O<br>U<br>R<br>S<br>E<br><br>R<br>E<br>M<br>O<br>V<br>E<br>D | T<br>A<br>C<br>K<br>C<br>O<br>A<br>T<br>@<br>0.075 GAL./S.Y. | T<br>A<br>C<br>K<br>C<br>O<br>A<br>T<br>F<br>O<br>R<br>I<br>N<br>T<br>E<br>R<br>M<br>E<br>D<br>I<br>A<br>T<br>E<br>C<br>O<br>U<br>R<br>S<br>E<br>@<br>0.05 GAL./S.Y. | T<br>A<br>C<br>K<br>C<br>O<br>A<br>T,<br>T<br>R<br>A<br>C<br>K<br>L<br>E<br>S<br>S<br>T<br>A<br>C<br>K<br>@<br>0.075 GAL./S.Y. | T<br>A<br>C<br>K<br>C<br>O<br>A<br>T,<br>T<br>R<br>A<br>C<br>K<br>L<br>E<br>S<br>S<br>T<br>A<br>C<br>K<br>F<br>O<br>R<br>I<br>N<br>T<br>E<br>R<br>M<br>E<br>D<br>I<br>A<br>T<br>E<br>C<br>O<br>U<br>R<br>S<br>E<br>@<br>0.05 GAL./S.Y. | T<br>H<br>I<br>C<br>K<br>N<br>E<br>S<br>S | S<br>U<br>R<br>F<br>A<br>C<br>E<br>C<br>O<br>U<br>R<br>S<br>E,<br>T<br>Y<br>P<br>E<br>1,<br>(448),<br>P<br>G<br>70-22M | T<br>H<br>I<br>C<br>K<br>N<br>E<br>S<br>S | I<br>N<br>T<br>E<br>R<br>M<br>E<br>D<br>I<br>A<br>T<br>E<br>C<br>O<br>U<br>R<br>S<br>E,<br>T<br>Y<br>P<br>E<br>1,<br>(448) |
|                                            |                            |                       |                  |                                                     | A                                                                       | B   | C   |                  |                                                                                                      |                                                              |                                                                                                                                                                      |                                                                                                                                |                                                                                                                                                                                                                                        |                                           |                                                                                                                        |                                           |                                                                                                                            |
|                                            |                            |                       |                  |                                                     | FT.                                                                     | FT. | FT. |                  |                                                                                                      |                                                              |                                                                                                                                                                      |                                                                                                                                |                                                                                                                                                                                                                                        |                                           |                                                                                                                        |                                           |                                                                                                                            |
| 3                                          | GUE                        | S.R. 209              | LT               | SR 658                                              | 32                                                                      | 23  | 85  | 192.0            | 192.0                                                                                                |                                                              |                                                                                                                                                                      | 14.4                                                                                                                           | 9.6                                                                                                                                                                                                                                    | 1.25                                      | 6.7                                                                                                                    | 0.50                                      | 2.7                                                                                                                        |
|                                            |                            |                       | LT               | TWP RD 3645 (WESTWOOD LN)                           | 16                                                                      | 29  | 51  | 71.2             | 71.2                                                                                                 |                                                              |                                                                                                                                                                      | 5.4                                                                                                                            | 3.6                                                                                                                                                                                                                                    | 1.25                                      | 2.5                                                                                                                    | 0.50                                      | 1.0                                                                                                                        |
|                                            |                            |                       | RT               | CO RD 615 (COLLEGE HILL RD)                         | 27                                                                      | 29  | 107 | 204.0            | 204.0                                                                                                |                                                              |                                                                                                                                                                      | 15.3                                                                                                                           | 10.2                                                                                                                                                                                                                                   | 1.25                                      | 7.1                                                                                                                    | 0.50                                      | 2.9                                                                                                                        |
|                                            |                            |                       |                  |                                                     |                                                                         |     |     |                  |                                                                                                      |                                                              |                                                                                                                                                                      |                                                                                                                                |                                                                                                                                                                                                                                        |                                           |                                                                                                                        |                                           |                                                                                                                            |
| LOCATION 3 TOTALS (CARRIED TO SUB-SUMMARY) |                            |                       |                  |                                                     |                                                                         |     |     |                  | 467.2                                                                                                |                                                              |                                                                                                                                                                      | 35.1                                                                                                                           | 23.4                                                                                                                                                                                                                                   |                                           | 16.3                                                                                                                   |                                           | 6.6                                                                                                                        |
|                                            |                            |                       |                  |                                                     |                                                                         |     |     |                  |                                                                                                      |                                                              |                                                                                                                                                                      |                                                                                                                                |                                                                                                                                                                                                                                        |                                           |                                                                                                                        |                                           |                                                                                                                            |
| 4                                          | GUE                        | S.R. 209              | LT               | TWP RD 361 (MORRISON RD)                            | 45                                                                      | 20  | 80  | 250.0            | 250.0                                                                                                |                                                              |                                                                                                                                                                      | 18.8                                                                                                                           | 12.5                                                                                                                                                                                                                                   | 1.25                                      | 8.7                                                                                                                    | 0.50                                      | 3.5                                                                                                                        |
|                                            |                            |                       | RT               | CAMPBELL LN                                         | 15                                                                      | 12  | 26  | 31.7             | 31.7                                                                                                 |                                                              |                                                                                                                                                                      | 2.4                                                                                                                            | 1.6                                                                                                                                                                                                                                    | 1.25                                      | 1.2                                                                                                                    | 0.50                                      | 0.5                                                                                                                        |
|                                            |                            |                       | LT               | TWP RD 6319 (RIDGEWAY RD)                           | 20                                                                      | 20  | 45  | 72.3             | 72.3                                                                                                 |                                                              |                                                                                                                                                                      | 5.5                                                                                                                            | 3.7                                                                                                                                                                                                                                    | 1.25                                      | 2.6                                                                                                                    | 0.50                                      | 1.1                                                                                                                        |
|                                            |                            |                       | RT               | 21ST ST                                             | 15                                                                      | 20  | 36  | 46.7             | 46.7                                                                                                 |                                                              |                                                                                                                                                                      | 3.6                                                                                                                            | 2.4                                                                                                                                                                                                                                    | 1.25                                      | 1.7                                                                                                                    | 0.50                                      | 0.7                                                                                                                        |
|                                            |                            |                       | RT               | COSHOCTON AVE (DETAIL 5)                            | 71                                                                      | 29  |     | 114.4            | 114.4                                                                                                |                                                              |                                                                                                                                                                      | 8.6                                                                                                                            | 5.8                                                                                                                                                                                                                                    | 1.25                                      | 4.0                                                                                                                    | 0.50                                      | 1.6                                                                                                                        |
|                                            |                            |                       |                  |                                                     |                                                                         |     |     |                  |                                                                                                      |                                                              |                                                                                                                                                                      |                                                                                                                                |                                                                                                                                                                                                                                        |                                           |                                                                                                                        |                                           |                                                                                                                            |
| LOCATION 4 TOTALS (CARRIED TO SUB-SUMMARY) |                            |                       |                  |                                                     |                                                                         |     |     |                  | 515.1                                                                                                |                                                              |                                                                                                                                                                      | 38.9                                                                                                                           | 26.0                                                                                                                                                                                                                                   |                                           | 18.2                                                                                                                   |                                           | 7.4                                                                                                                        |
|                                            |                            |                       |                  |                                                     |                                                                         |     |     |                  |                                                                                                      |                                                              |                                                                                                                                                                      |                                                                                                                                |                                                                                                                                                                                                                                        |                                           |                                                                                                                        |                                           |                                                                                                                            |
| 5                                          | GUE                        | S.R. 209              | LT               | ALLEY                                               | 11                                                                      | 17  | 21  | 23.3             | 23.3                                                                                                 |                                                              |                                                                                                                                                                      | 1.8                                                                                                                            |                                                                                                                                                                                                                                        | 1.25                                      | 0.9                                                                                                                    |                                           | 0.0                                                                                                                        |
|                                            |                            |                       | LT               | FIRST ST                                            | 15                                                                      | 25  | 44  | 57.5             | 57.5                                                                                                 |                                                              |                                                                                                                                                                      | 4.4                                                                                                                            |                                                                                                                                                                                                                                        | 1.25                                      | 2.0                                                                                                                    |                                           | 0.0                                                                                                                        |
|                                            |                            |                       | LT               | SECOND ST                                           | 48                                                                      | 24  | 112 | 362.7            | 362.7                                                                                                |                                                              |                                                                                                                                                                      | 27.3                                                                                                                           |                                                                                                                                                                                                                                        | 1.25                                      | 12.6                                                                                                                   |                                           | 0.0                                                                                                                        |
|                                            |                            |                       | LT               | THIRD ST                                            | 25                                                                      | 28  | 41  | 95.9             | 95.9                                                                                                 |                                                              |                                                                                                                                                                      | 7.2                                                                                                                            |                                                                                                                                                                                                                                        | 1.25                                      | 3.4                                                                                                                    |                                           | 0.0                                                                                                                        |
|                                            |                            |                       | RT               | THIRD ST                                            | 25                                                                      | 28  | 43  | 98.7             | 98.7                                                                                                 |                                                              |                                                                                                                                                                      | 7.5                                                                                                                            |                                                                                                                                                                                                                                        | 1.25                                      | 3.5                                                                                                                    |                                           | 0.0                                                                                                                        |
|                                            |                            |                       | LT               | ALLEY                                               | 25                                                                      | 17  | 26  | 59.8             | 59.8                                                                                                 |                                                              |                                                                                                                                                                      | 4.5                                                                                                                            |                                                                                                                                                                                                                                        | 1.25                                      | 2.1                                                                                                                    |                                           | 0.0                                                                                                                        |
|                                            |                            |                       | RT               | ALLEY                                               | 16                                                                      | 14  | 22  | 32.0             | 32.0                                                                                                 |                                                              |                                                                                                                                                                      | 2.4                                                                                                                            |                                                                                                                                                                                                                                        | 1.25                                      | 1.2                                                                                                                    |                                           | 0.0                                                                                                                        |
|                                            |                            |                       | LT               | FOURTH ST                                           | 20                                                                      | 32  | 48  | 88.9             | 88.9                                                                                                 |                                                              |                                                                                                                                                                      | 6.7                                                                                                                            |                                                                                                                                                                                                                                        | 1.25                                      | 3.1                                                                                                                    |                                           | 0.0                                                                                                                        |
|                                            |                            |                       | RT               | FOURTH ST                                           | NO WORK, CONCRETE SURFACE                                               |     |     |                  |                                                                                                      |                                                              |                                                                                                                                                                      |                                                                                                                                |                                                                                                                                                                                                                                        |                                           |                                                                                                                        |                                           |                                                                                                                            |
|                                            |                            |                       | LT               | ALLEY                                               | 17                                                                      | 22  | 15  | 35.0             | 35.0                                                                                                 |                                                              |                                                                                                                                                                      | 2.7                                                                                                                            |                                                                                                                                                                                                                                        | 1.25                                      | 1.3                                                                                                                    |                                           | 0.0                                                                                                                        |
|                                            |                            |                       | RT               | ALLEY                                               | 15                                                                      | 20  | 15  | 29.2             | 29.2                                                                                                 |                                                              |                                                                                                                                                                      | 2.2                                                                                                                            |                                                                                                                                                                                                                                        | 1.25                                      | 1.1                                                                                                                    |                                           | 0.0                                                                                                                        |
|                                            |                            |                       | LT               | ALLEY                                               | 15                                                                      | 22  | 15  | 30.9             | 30.9                                                                                                 |                                                              |                                                                                                                                                                      | 2.4                                                                                                                            |                                                                                                                                                                                                                                        | 1.25                                      | 1.1                                                                                                                    |                                           | 0.0                                                                                                                        |
|                                            |                            |                       | RT               | ALLEY                                               | 15                                                                      | 22  | 15  | 30.9             | 30.9                                                                                                 |                                                              |                                                                                                                                                                      | 2.4                                                                                                                            |                                                                                                                                                                                                                                        | 1.25                                      | 1.1                                                                                                                    |                                           | 0.0                                                                                                                        |
|                                            |                            |                       | LT               | FIFTH ST                                            | 19                                                                      | 24  | 41  | 68.7             | 68.7                                                                                                 |                                                              |                                                                                                                                                                      | 5.2                                                                                                                            |                                                                                                                                                                                                                                        | 1.25                                      | 2.4                                                                                                                    |                                           | 0.0                                                                                                                        |
|                                            |                            |                       | LT               | STEUBENVILLE AVE                                    | 26                                                                      | 34  | 56  | 130.0            | 130.0                                                                                                |                                                              |                                                                                                                                                                      | 9.8                                                                                                                            |                                                                                                                                                                                                                                        | 1.25                                      | 4.6                                                                                                                    |                                           | 0.0                                                                                                                        |
|                                            |                            |                       | RT               | S.R. 209 (FIFTH ST)                                 | 35                                                                      | 36  | 84  | 233.4            | 178.9                                                                                                |                                                              |                                                                                                                                                                      | 17.6                                                                                                                           | 11.7                                                                                                                                                                                                                                   | 1.25                                      | 8.2                                                                                                                    | 1.00                                      | 6.5                                                                                                                        |
|                                            |                            |                       |                  |                                                     |                                                                         |     |     |                  |                                                                                                      |                                                              |                                                                                                                                                                      |                                                                                                                                |                                                                                                                                                                                                                                        |                                           |                                                                                                                        |                                           |                                                                                                                            |
| LOCATION 5 TOTALS (CARRIED TO SUB-SUMMARY) |                            |                       |                  |                                                     |                                                                         |     |     |                  | 1,322.4                                                                                              |                                                              |                                                                                                                                                                      | 104.1                                                                                                                          | 11.7                                                                                                                                                                                                                                   |                                           | 48.6                                                                                                                   |                                           | 6.5                                                                                                                        |

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BRIDGE TREATMENT

LOCATION 3

DETAIL ① GUE-209-0577: BUTT JOINT AT APPROACH SLABS, TAPER MILL 150'  
DETAIL ① GUE-209-0663: BUTT JOINT AT APPROACH SLABS, TAPER MILL 150'

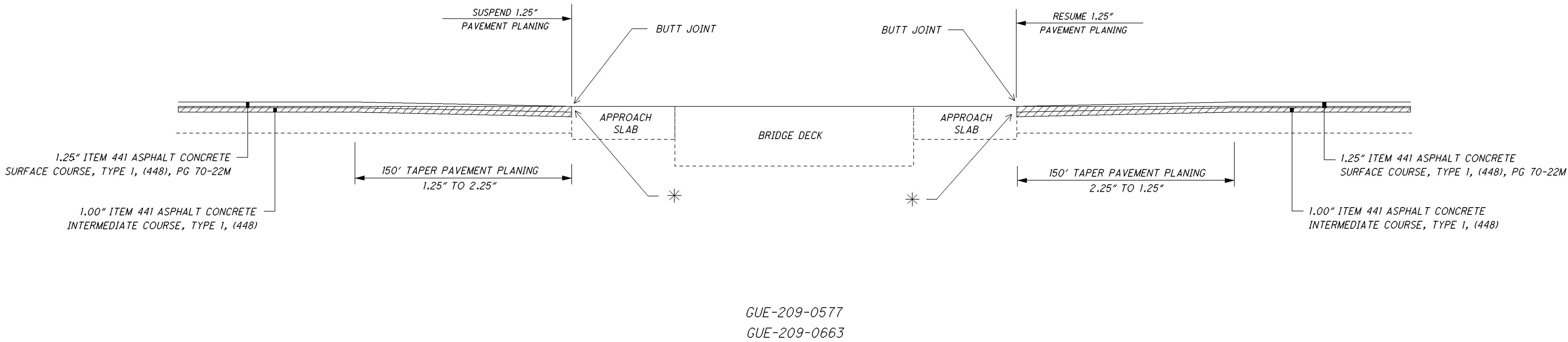
LOCATION 4

DETAIL ② GUE-209-0763: BUTT JOINT AT APPROACH SLABS, TAPER MILL 150'

DEDUCTIONS = PAVEMENT/SHOULDER WIDTHS X (BRIDGE LENGTH + APPROACH SLABS)

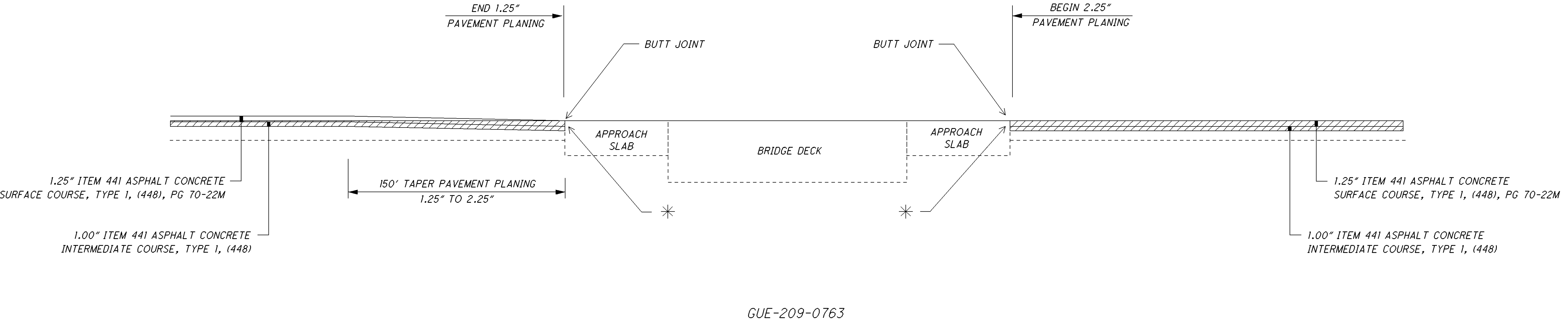
| BRIDGE DATA |                                            |                           |          |           |                         |                        |                                                         |                   |                                              |                                             |         |
|-------------|--------------------------------------------|---------------------------|----------|-----------|-------------------------|------------------------|---------------------------------------------------------|-------------------|----------------------------------------------|---------------------------------------------|---------|
| LOCATION    | COUNTY,<br>ROUTE, BRIDGE<br>NO.            | LENGTH<br>(BRIDGE LIMITS) | WIDTH    | DECK AREA | APPROACH SLAB<br>LENGTH | APPROACH SLAB<br>WIDTH | APPROACH SLAB<br>AREA (INCLUDES BOTH<br>APPROACH SLABS) | DETAIL (SHEET 17) | MAINLINE DEDUCTIONS<br>(CARRIED TO SHEET 12) | 516<br>2" DEEP JOINT SEALER,<br>AS PER PLAN | REMARKS |
|             |                                            | LIN. FT.                  | LIN. FT. | SQ. YD.   | LIN. FT.                | LIN. FT.               | SQ. YD.                                                 |                   | SQ. YD.                                      | FT                                          |         |
|             |                                            |                           |          |           |                         |                        |                                                         |                   |                                              |                                             |         |
| 3           | GUE-209-0577                               | 27.0                      | 32.0     | 96.0      | 25.0                    | 32.0                   | 177.8                                                   | 1                 | 171.2                                        | 64.0                                        |         |
|             | GUE-209-0663                               | 146.0                     | 28.0     | 454.2     | 25.0                    | 28.0                   | 155.6                                                   | 1                 | 435.6                                        | 56.0                                        |         |
|             |                                            |                           |          |           |                         |                        |                                                         |                   |                                              |                                             |         |
|             | BRIDGE DEDUCTIONS                          |                           |          |           |                         |                        |                                                         |                   | (606.8)                                      |                                             |         |
|             |                                            |                           |          |           |                         |                        |                                                         |                   |                                              |                                             |         |
|             | LOCATION 3 TOTALS (CARRIED TO SUB-SUMMARY) |                           |          |           |                         |                        |                                                         |                   |                                              | 120.0                                       |         |
| 4           | GUE-209-0763                               | 179.0                     | 38.0     | 755.8     | 25.0                    | 38.0                   | 211.2                                                   | 2                 | 559.8                                        | 76.0                                        |         |
|             |                                            |                           |          |           |                         |                        |                                                         |                   |                                              |                                             |         |
|             | BRIDGE DEDUCTIONS                          |                           |          |           |                         |                        |                                                         |                   | (559.8)                                      |                                             |         |
|             |                                            |                           |          |           |                         |                        |                                                         |                   |                                              |                                             |         |
|             | LOCATION 4 TOTALS (CARRIED TO SUB-SUMMARY) |                           |          |           |                         |                        |                                                         |                   |                                              | 76.0                                        |         |

DETAIL 1



BUTT JOINT AT APPROACH SLABS

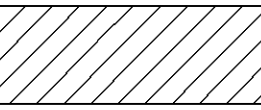
DETAIL 2



BUTT JOINT AT APPROACH SLABS

DETAILS NOT TO SCALE

\* ITEM 516 2" DEEP JOINT SEALER, AS PER PLAN



ITEM 254 PAVEMENT PLANING

|                               |         |
|-------------------------------|---------|
| CALCULATED                    | JKN     |
|                               | CHECKED |
| DNN                           | DNN     |
|                               | DNN     |
| BRIDGE DECK TREATMENT DETAILS |         |
| MUS-209-0.00<br>GUE-209-0.00  |         |
| 17<br>40                      |         |

| ITEM 648 EDGE LINE, 4"                     |                            |                       |        |      |                            |                                                      |                  |                               |               |
|--------------------------------------------|----------------------------|-----------------------|--------|------|----------------------------|------------------------------------------------------|------------------|-------------------------------|---------------|
| L<br>O<br>C<br>A<br>T<br>I<br>O<br>N       | C<br>O<br>U<br>N<br>T<br>Y | R<br>O<br>U<br>T<br>E | S.L.M. |      | TOTAL<br>LENGTH<br>(MILES) | I N F O R M A T I O N   O N L Y                      |                  | TOTAL<br>EDGE<br>LINE<br>(4") | R E M A R K S |
|                                            |                            |                       |        |      |                            | W H I T E   E D G E   L I N E<br>Q U A N T I T I E S |                  |                               |               |
|                                            |                            |                       | FROM   | TO   |                            | TOTAL<br>MILES                                       | HIGHWAY<br>MILES | MILES                         |               |
| 1                                          | MUS                        | S.R. 209              | 0.00   | 1.64 | 1.64                       | 3.28                                                 | 3.28             | 3.28                          |               |
| LOCATION 1 TOTALS (CARRIED TO SUB-SUMMARY) |                            |                       |        |      |                            |                                                      |                  | 3.28                          |               |
| 2                                          | GUE                        | S.R. 209              | 0.00   | 5.54 | 5.54                       | 11.08                                                | 11.08            | 11.08                         |               |
| LOCATION 2 TOTALS (CARRIED TO SUB-SUMMARY) |                            |                       |        |      |                            |                                                      |                  | 11.08                         |               |
| 3                                          | GUE                        | S.R. 209              | 5.54   | 7.07 | 1.53                       | 3.06                                                 | 3.06             | 3.06                          |               |
| LOCATION 3 TOTALS (CARRIED TO SUB-SUMMARY) |                            |                       |        |      |                            |                                                      |                  | 3.06                          |               |
| 4                                          | GUE                        | S.R. 209              | 7.07   | 7.64 | 0.57                       | 1.14                                                 | 1.14             | 1.14                          |               |
| LOCATION 4 TOTALS (CARRIED TO SUB-SUMMARY) |                            |                       |        |      |                            |                                                      |                  | 1.14                          |               |
| 5                                          | GUE                        | S.R. 209              | 7.64   | 7.69 | 0.05                       | 0.10                                                 | 0.10             | 0.10                          |               |
| LOCATION 5 TOTALS (CARRIED TO SUB-SUMMARY) |                            |                       |        |      |                            |                                                      |                  | 0.10                          |               |

| ITEM 648 CENTER LINE                       |                            |                       |        |      |                            |                        |                              |                                  |         |
|--------------------------------------------|----------------------------|-----------------------|--------|------|----------------------------|------------------------|------------------------------|----------------------------------|---------|
| L<br>O<br>C<br>A<br>T<br>I<br>O<br>N       | C<br>O<br>U<br>N<br>T<br>Y | R<br>O<br>U<br>T<br>E | S.L.M. |      | TOTAL<br>LENGTH<br>(MILES) | INFORMATION ONLY       |                              | TOTAL<br>CENTER<br>LINE<br>MILES | REMARKS |
|                                            |                            |                       |        |      |                            | CENTER LINE QUANTITIES |                              |                                  |         |
|                                            |                            |                       | FROM   | TO   |                            | TOTAL<br>MILES         | EQUIVALEN<br>T SOLID<br>LINE |                                  |         |
| 1                                          | MUS                        | S.R. 209              | 0.00   | 1.64 | 1.64                       | 1.64                   | 3.242                        | 1.64                             |         |
| LOCATION 1 TOTALS (CARRIED TO SUB-SUMMARY) |                            |                       |        |      |                            |                        |                              | 1.64                             |         |
| 2                                          | GUE                        | S.R. 209              | 0.00   | 5.54 | 5.54                       | 5.54                   | 10.839                       | 5.54                             |         |
| LOCATION 2 TOTALS (CARRIED TO SUB-SUMMARY) |                            |                       |        |      |                            |                        |                              | 5.54                             |         |
| 3                                          | GUE                        | S.R. 209              | 5.54   | 7.07 | 1.53                       | 1.53                   | 2.839                        | 1.53                             |         |
| LOCATION 3 TOTALS (CARRIED TO SUB-SUMMARY) |                            |                       |        |      |                            |                        |                              | 1.53                             |         |
| 4                                          | GUE                        | S.R. 209              | 7.07   | 7.64 | 0.57                       | 0.57                   | 0.809                        | 0.57                             |         |
| LOCATION 4 TOTALS (CARRIED TO SUB-SUMMARY) |                            |                       |        |      |                            |                        |                              | 0.57                             |         |
| 5                                          | GUE                        | S.R. 209              | 7.64   | 8.11 | 0.47                       | 0.47                   | 0.412                        | 0.47                             |         |
| LOCATION 5 TOTALS (CARRIED TO SUB-SUMMARY) |                            |                       |        |      |                            |                        |                              | 0.47                             |         |

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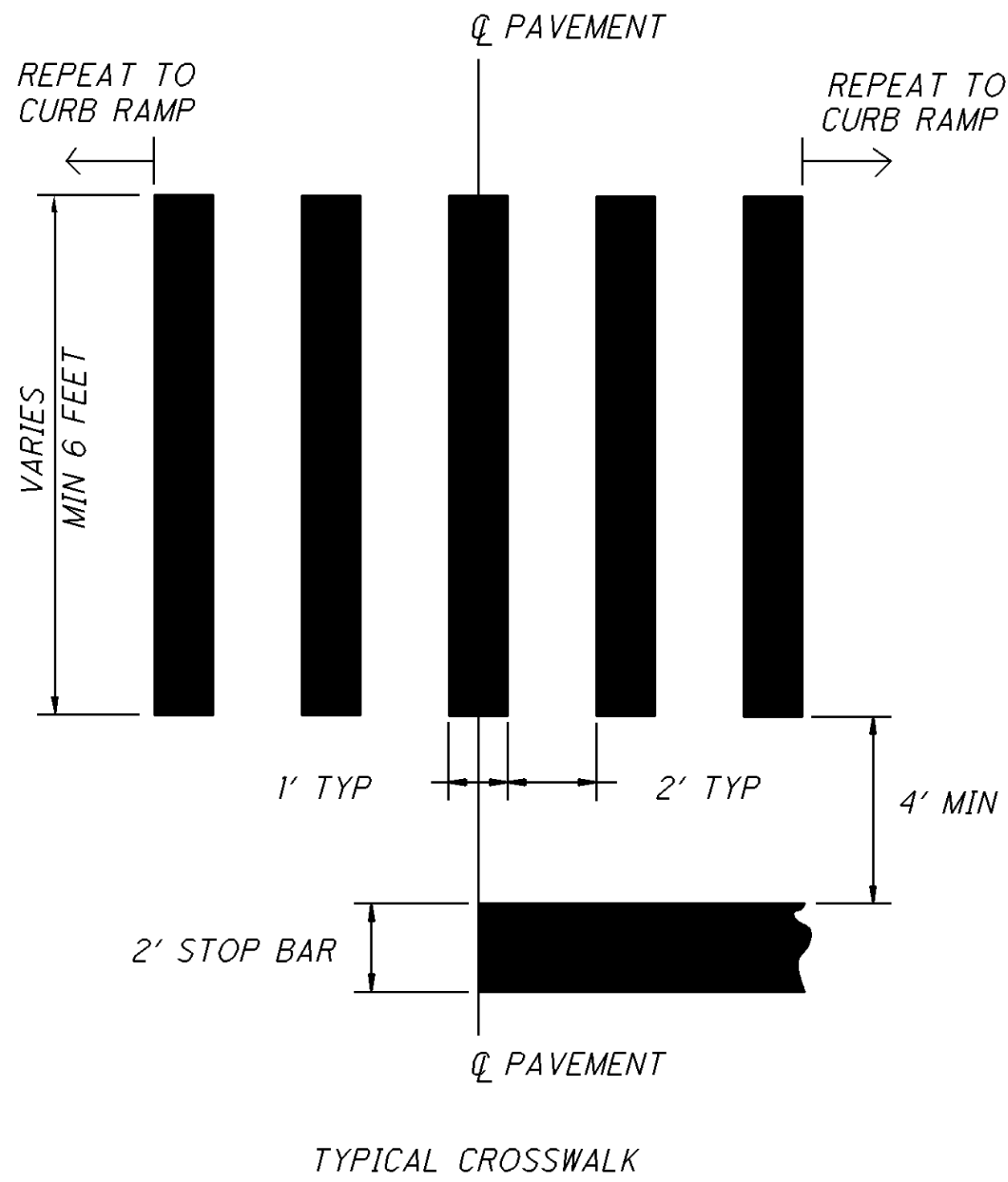
NOTES  
1. AS STATED ON SHEET 2, THE CONTRACTOR SHALL  
DOCUMENT AND LOCATE EXISTING PAVEMENT MARKINGS.  
REPLACEMENT MARKINGS SHALL BE PLACED IN THE SAME  
LOCATIONS UNLESS OTHERWISE NOTED.

| ITEM 644 AUXILARY MARKING                  |        |          |      |                                |     |                           |                    |                |              |                             |                          |
|--------------------------------------------|--------|----------|------|--------------------------------|-----|---------------------------|--------------------|----------------|--------------|-----------------------------|--------------------------|
| LOCATION                                   | COUNTY | ROUTE    | SIDE | DESCRIPTION                    | SLM | CHANNELIZING LINE<br>(8") | STOP LINE<br>(24") | CROSSWALK LINE | LANE ARROW   | WORD ON<br>PAVEMENT,<br>72" | REMARKS                  |
|                                            |        |          |      |                                |     |                           |                    |                |              |                             |                          |
|                                            |        |          |      |                                |     | FT.                       | FT.                | FT.            | LEFT<br>EACH | ONLY<br>EACH                |                          |
|                                            |        |          |      |                                |     |                           |                    |                |              |                             |                          |
| 1                                          | MUS    | S.R. 209 | CL   | AT SR 83                       |     | NONE, RECENTLY PAVED      |                    |                |              |                             |                          |
|                                            |        |          | RT   | TWP RD 434 (RUBY RD)           |     |                           | 13                 |                |              |                             | PLACE AS DIRECTED        |
|                                            |        |          | RT   | TWP RD 434 (RUBY RD)           |     |                           | 20                 |                |              |                             | PLACE 21' FROM SR 209 CL |
|                                            |        |          | LT   | TWP RD 433 (STONEY POINT RD)   |     |                           | 40                 |                |              |                             | PLACE AS DIRECTED        |
|                                            |        |          | LT   | TWP RD 53 (LOUANA RD)          |     |                           | 42                 |                |              |                             | PLACE 19' FROM SR 209 CL |
|                                            |        |          |      |                                |     |                           |                    |                |              |                             |                          |
|                                            |        |          |      |                                |     |                           |                    |                |              |                             |                          |
| LOCATION 1 TOTALS (CARRIED TO SUB-SUMMARY) |        |          |      |                                |     |                           | 115                |                |              |                             |                          |
|                                            |        |          |      |                                |     |                           |                    |                |              |                             |                          |
| 2                                          | GUE    | S.R. 209 | RT   | TWP RD 11 (CABIN HILL RD)      |     |                           | 15                 |                |              |                             | PLACE AS DIRECTED        |
|                                            |        |          | LT   | TWP RD 1627 (UNFURLING LN)     |     |                           | 10                 |                |              |                             | PLACE 15' FROM SR 209 CL |
|                                            |        |          | RT   | TWP RD 161 (CAMPFIRE RD)       |     |                           | 21                 |                |              |                             | PLACE 15' FROM SR 209 CL |
|                                            |        |          | LT   | SR 662                         |     |                           | 34                 |                |              |                             | PLACE 22' FROM SR 209 CL |
|                                            |        |          | RT   | TWP RD 1624 (MATHEWS RD)       |     |                           | 27                 |                |              |                             | PLACE 20' FROM SR 209 CL |
|                                            |        |          | RT   | TWP RD 169 (LOVERS LANE)       |     |                           | 24                 |                |              |                             | PLACE 18' FROM SR 209 CL |
|                                            |        |          | RT   | CO RD 164 (BOBS RUN RD)        |     |                           | 24                 |                |              |                             | PLACE 15' FROM SR 209 CL |
|                                            |        |          | LT   | TWP RD 1650 (BOSTON LN)        |     |                           | 16                 |                |              |                             | PLACE 17' FROM SR 209 CL |
|                                            |        |          | RT   | TWP RD 615 (COLLEGE HILL RD)   |     |                           | 25                 |                |              |                             | PLACE 17' FROM SR 209 CL |
|                                            |        |          | LT   | TWP RD 166 (LAKE RD)           |     |                           | 30                 |                |              |                             | PLACE 18' FROM SR 209 CL |
|                                            |        |          | RT   | TWP RD 1659 (ASHWOOD ACRES DR) |     |                           | 26                 |                |              |                             | PLACE 16' FROM SR 209 CL |
|                                            |        |          | LT   | TWP RD 1664 (ANKER LN)         |     |                           | 18                 |                |              |                             | PLACE 16' FROM SR 209 CL |
|                                            |        |          | LT   | TWP RD 1665 (PROUDFIT LN)      |     |                           | 10                 |                |              |                             | PLACE 15' FROM SR 209 CL |
|                                            |        |          | RT   | TWP RD 1685                    |     |                           | 15                 |                |              |                             | PLACE 14' FROM SR 209 CL |
|                                            |        |          |      |                                |     |                           |                    |                |              |                             |                          |
|                                            |        |          |      |                                |     |                           |                    |                |              |                             |                          |
| LOCATION 2 TOTALS (CARRIED TO SUB-SUMMARY) |        |          |      |                                |     |                           | 295                |                |              |                             |                          |
|                                            |        |          |      |                                |     |                           |                    |                |              |                             |                          |
| 3                                          | GUE    | S.R. 209 | LT   | SR 658                         |     |                           | 23                 |                |              |                             | PLACE 17' FROM SR 209 CL |
|                                            |        |          | LT   | TWP RD 3645 (WESTWOOD LN)      |     |                           | 14                 |                |              |                             | PLACE AS DIRECTED        |
|                                            |        |          | RT   | CO RD 615 (COLLEGE HILL RD)    |     |                           | 30                 |                |              |                             | PLACE 18' FROM SR 209 CL |
|                                            |        |          |      |                                |     |                           |                    |                |              |                             |                          |
|                                            |        |          |      |                                |     |                           |                    |                |              |                             |                          |
| LOCATION 3 TOTALS (CARRIED TO SUB-SUMMARY) |        |          |      |                                |     |                           | 67                 |                |              |                             |                          |

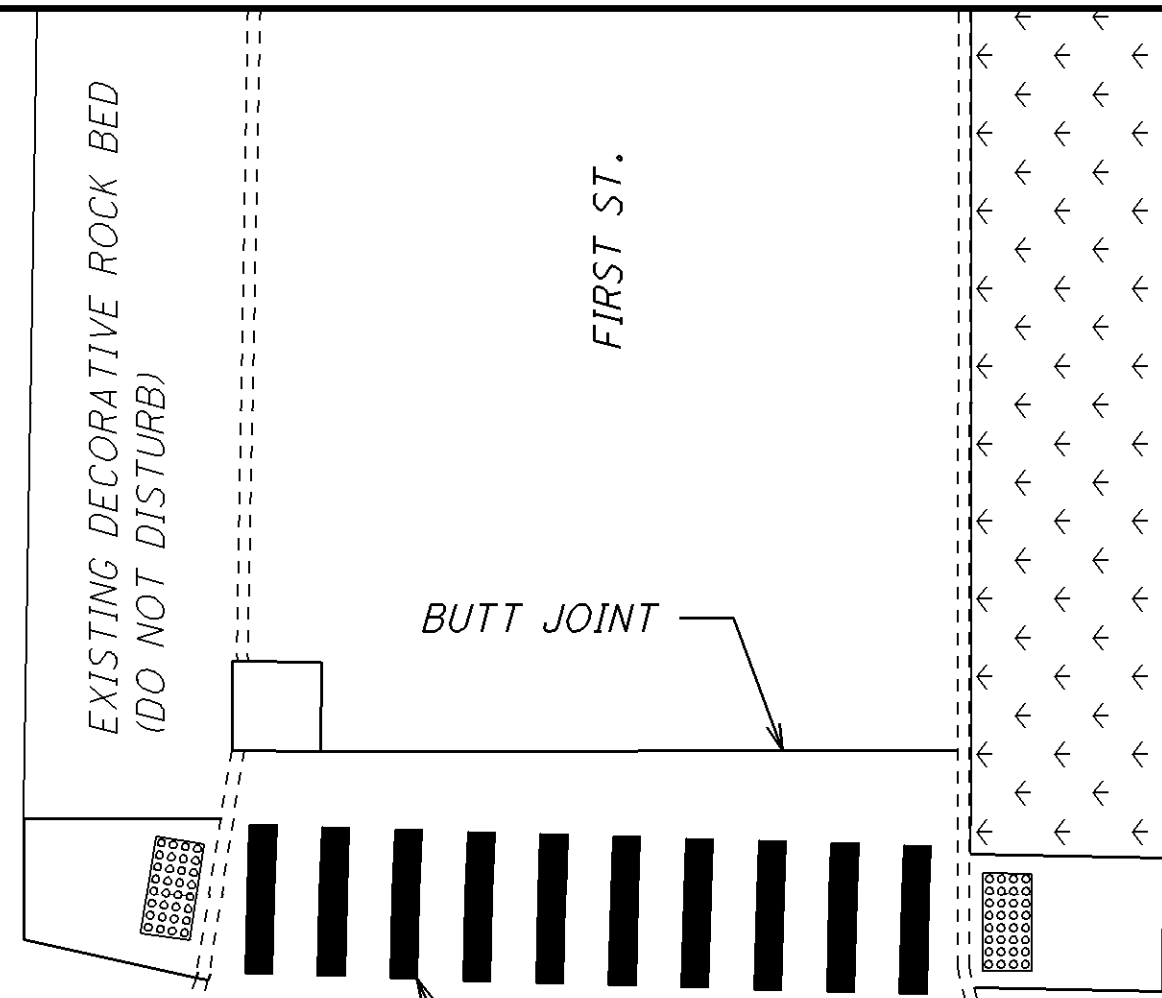
NOTES  
1. AS STATED ON SHEET 2, THE CONTRACTOR SHALL  
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REPLACEMENT MARKINGS SHALL BE PLACED IN THE SAME  
LOCATIONS UNLESS OTHERWISE NOTED.

| ITEM 644 AUXILARY MARKING                  |                            |                       |                  |                                                     |             |                                                                                      |                                               |                                                               |                                           |                                                                            |                                 |
|--------------------------------------------|----------------------------|-----------------------|------------------|-----------------------------------------------------|-------------|--------------------------------------------------------------------------------------|-----------------------------------------------|---------------------------------------------------------------|-------------------------------------------|----------------------------------------------------------------------------|---------------------------------|
| L<br>O<br>C<br>A<br>T<br>I<br>O<br>N       | C<br>O<br>U<br>N<br>T<br>Y | R<br>O<br>U<br>T<br>E | S<br>I<br>D<br>E | D<br>E<br>S<br>C<br>R<br>I<br>P<br>T<br>I<br>O<br>N | S<br>L<br>M | CH<br>A<br>N<br>N<br>E<br>L<br>I<br>Z<br>I<br>N<br>G<br>L<br>I<br>N<br>E<br><br>(8") | ST<br>O<br>P<br>L<br>I<br>N<br>E<br><br>(24") | C<br>R<br>O<br>S<br>S<br>W<br>A<br>L<br>K<br>L<br>I<br>N<br>E | L<br>A<br>N<br>E<br>A<br>R<br>R<br>O<br>W | W<br>O<br>R<br>D<br>O<br>N<br>P<br>A<br>V<br>E<br>M<br>E<br>N<br>T,<br>72" | R<br>E<br>M<br>A<br>R<br>K<br>S |
|                                            |                            |                       |                  |                                                     |             |                                                                                      |                                               |                                                               | L<br>E<br>F<br>T                          | O<br>N<br>L<br>Y                                                           |                                 |
|                                            |                            |                       |                  |                                                     |             | F<br>T.                                                                              | F<br>T.                                       | F<br>T.                                                       | E<br>A<br>C<br>H                          | E<br>A<br>C<br>H                                                           |                                 |
|                                            |                            |                       |                  |                                                     |             |                                                                                      |                                               |                                                               |                                           |                                                                            |                                 |
| 4                                          | GUE                        | S.R. 209              | LT               | TWP RD 361 (MORRISON RD)                            |             |                                                                                      | 28                                            |                                                               |                                           |                                                                            | PLACE 17' FROM SR 209 CL        |
|                                            |                            |                       | RT               | CAMPBELL LN                                         |             |                                                                                      | 10                                            |                                                               |                                           |                                                                            | PLACE 14' FROM SR 209 CL        |
|                                            |                            |                       | LT               | TWP RD 6319 (RIDGEWAY RD)                           |             |                                                                                      | 13                                            |                                                               |                                           |                                                                            | PLACE 16' FROM SR 209 CL        |
|                                            |                            |                       | RT               | 21ST ST                                             |             |                                                                                      | 17                                            |                                                               |                                           |                                                                            | PLACE 14' FROM SR 209 CL        |
|                                            |                            |                       | RT               | COSHOCTON AVE                                       |             |                                                                                      | 24                                            |                                                               |                                           |                                                                            | PLACE 16' FROM SR 209 CL        |
|                                            |                            |                       |                  |                                                     |             |                                                                                      |                                               |                                                               |                                           |                                                                            |                                 |
|                                            |                            |                       |                  |                                                     |             |                                                                                      |                                               |                                                               |                                           |                                                                            |                                 |
| LOCATION 4 TOTALS (CARRIED TO SUB-SUMMARY) |                            |                       |                  |                                                     |             |                                                                                      | 92                                            |                                                               |                                           |                                                                            |                                 |
|                                            |                            |                       |                  |                                                     |             |                                                                                      |                                               |                                                               |                                           |                                                                            |                                 |
| 5                                          | GUE                        | S.R. 209              | LT               | FIRST ST                                            |             |                                                                                      |                                               | 60                                                            |                                           |                                                                            | SEE SHEET 21 FOR DETAILS        |
|                                            |                            |                       | CL               | ON SR 209 BEFORE SECOND ST                          |             |                                                                                      | 15                                            |                                                               |                                           |                                                                            | PLACE AS DIRECTED               |
|                                            |                            |                       | LT               | SECOND ST                                           |             |                                                                                      | 17                                            | 114                                                           |                                           |                                                                            | SEE SHEET 21 FOR DETAILS        |
|                                            |                            |                       | CL               | ON SR 209 AFTER SECOND ST                           |             |                                                                                      | 15                                            |                                                               |                                           |                                                                            | PLACE AS DIRECTED               |
|                                            |                            |                       | CL               | ON 209 BEFORE THIRD ST                              |             |                                                                                      |                                               | 60                                                            |                                           |                                                                            | SEE SHEET 22 FOR DETAILS        |
|                                            |                            |                       | LT               | THIRD ST                                            |             |                                                                                      | 11                                            |                                                               |                                           |                                                                            | SEE SHEET 22 FOR DETAILS        |
|                                            |                            |                       | RT               | THIRD ST                                            |             |                                                                                      |                                               | 54                                                            |                                           |                                                                            | SEE SHEET 22 FOR DETAILS        |
|                                            |                            |                       | LT               | ALLEY                                               |             |                                                                                      |                                               | 30                                                            |                                           |                                                                            | PLACE AS DIRECTED               |
|                                            |                            |                       | RT               | ALLEY                                               |             |                                                                                      |                                               | 24                                                            |                                           |                                                                            | PLACE AS DIRECTED               |
|                                            |                            |                       | CL               | ON SR 209 BEFORE FOURTH ST                          |             |                                                                                      | 15                                            |                                                               |                                           |                                                                            | SEE SHEET 23 FOR DETAILS        |
|                                            |                            |                       | LT               | FOURTH ST                                           |             |                                                                                      |                                               | 66                                                            |                                           |                                                                            | SEE SHEET 23 FOR DETAILS        |
|                                            |                            |                       | CL               | ON SR 209 AFTER FOURTH ST                           |             |                                                                                      | 18                                            | 66                                                            |                                           |                                                                            | SEE SHEET 23 FOR DETAILS        |
|                                            |                            |                       | LT               | ALLEY                                               |             |                                                                                      |                                               | 30                                                            |                                           |                                                                            | PLACE AS DIRECTED               |
|                                            |                            |                       | RT               | ALLEY                                               |             |                                                                                      |                                               | 30                                                            |                                           |                                                                            | PLACE AS DIRECTED               |
|                                            |                            |                       | LT               | ALLEY                                               |             |                                                                                      |                                               | 30                                                            |                                           |                                                                            | PLACE AS DIRECTED               |
|                                            |                            |                       | RT               | ALLEY                                               |             |                                                                                      |                                               | 30                                                            |                                           |                                                                            | PLACE AS DIRECTED               |
|                                            |                            |                       | CL               | ON SR 209 BEFORE FIFTH ST                           |             | 84                                                                                   | 24                                            | 84                                                            | 1                                         | 1                                                                          | SEE SHEET 24 FOR DETAILS        |
|                                            |                            |                       | LT               | FIFTH ST                                            |             |                                                                                      |                                               | 40                                                            |                                           |                                                                            | SEE SHEET 24 FOR DETAILS        |
|                                            |                            |                       | LT               | STEUBENVILLE AVE                                    |             |                                                                                      | 24                                            | 78                                                            |                                           |                                                                            | SEE SHEET 24 FOR DETAILS        |
|                                            |                            |                       | CL               | ON 209 AFTER STEUBENVILLE AVE                       |             | 11                                                                                   | 12                                            | 98                                                            |                                           |                                                                            | SEE SHEET 24 FOR DETAILS        |
|                                            |                            |                       |                  |                                                     |             |                                                                                      |                                               |                                                               |                                           |                                                                            |                                 |
|                                            |                            |                       |                  |                                                     |             |                                                                                      |                                               |                                                               |                                           |                                                                            |                                 |
| LOCATION 5 TOTALS (CARRIED TO SUB-SUMMARY) |                            |                       |                  |                                                     |             | 95                                                                                   | 151                                           | 894                                                           | 1                                         | 1                                                                          |                                 |

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ITEM 644 CROSSWALK LINE, AS PER PLAN



PAVEMENT MARKING QUANTITIES CARRIED TO SHEET 20.

S.R. 209  
(STEUBENVILLE AVE.)

EX. 9.5' BRICK WALKWAY

BUTT JOINT

SECOND ST.

17' STOP BAR

114' - CROSSWALK LINE, AS PER PLAN

PAVEMENT MARKING QUANTITIES CARRIED TO SHEET 20.

EX. 5' WALK

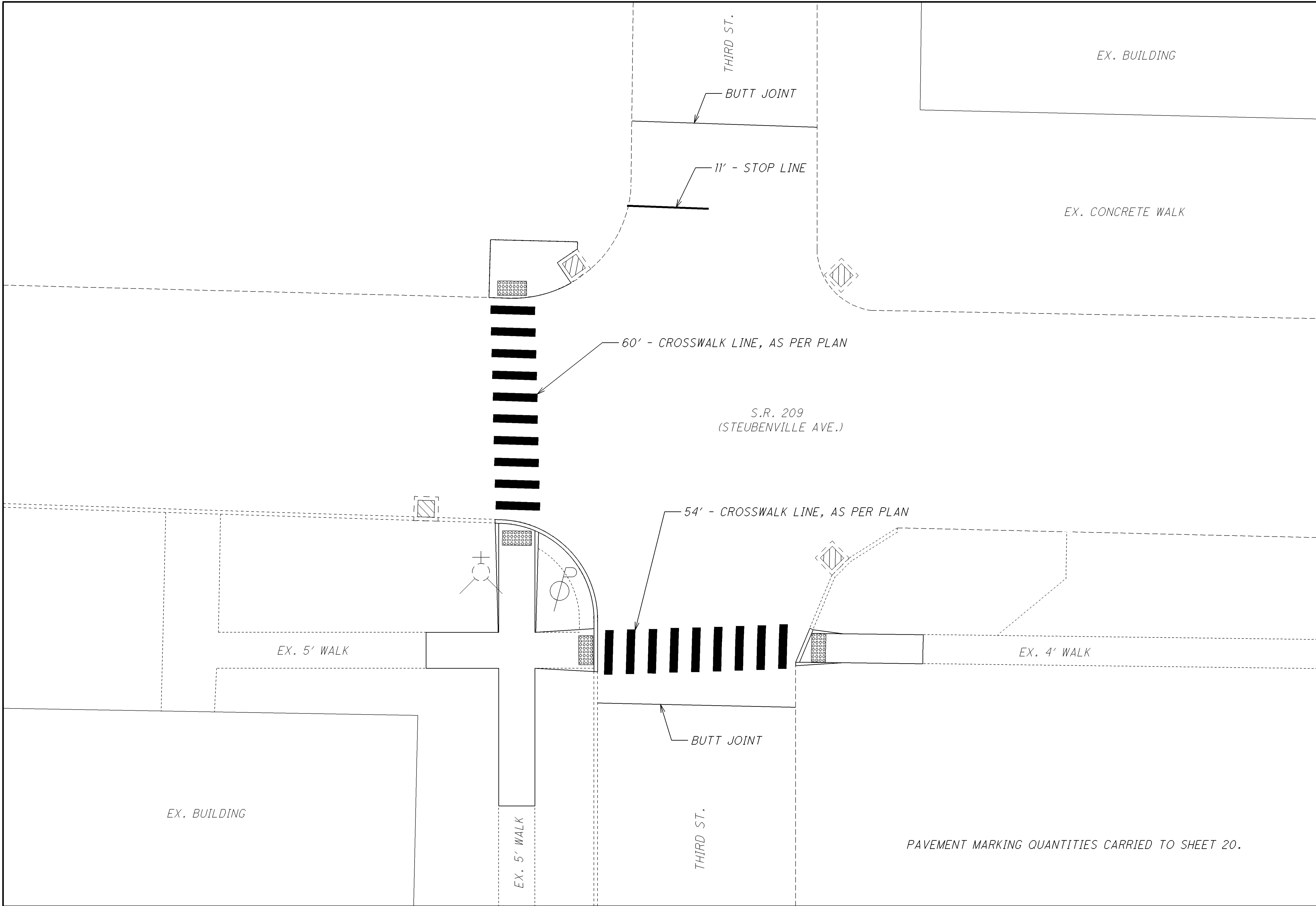
S.R. 209  
(STEUBENVILLE AVE.)

PAVEMENT MARKINGS

MUS-209-0.00  
GUE-209-0.00

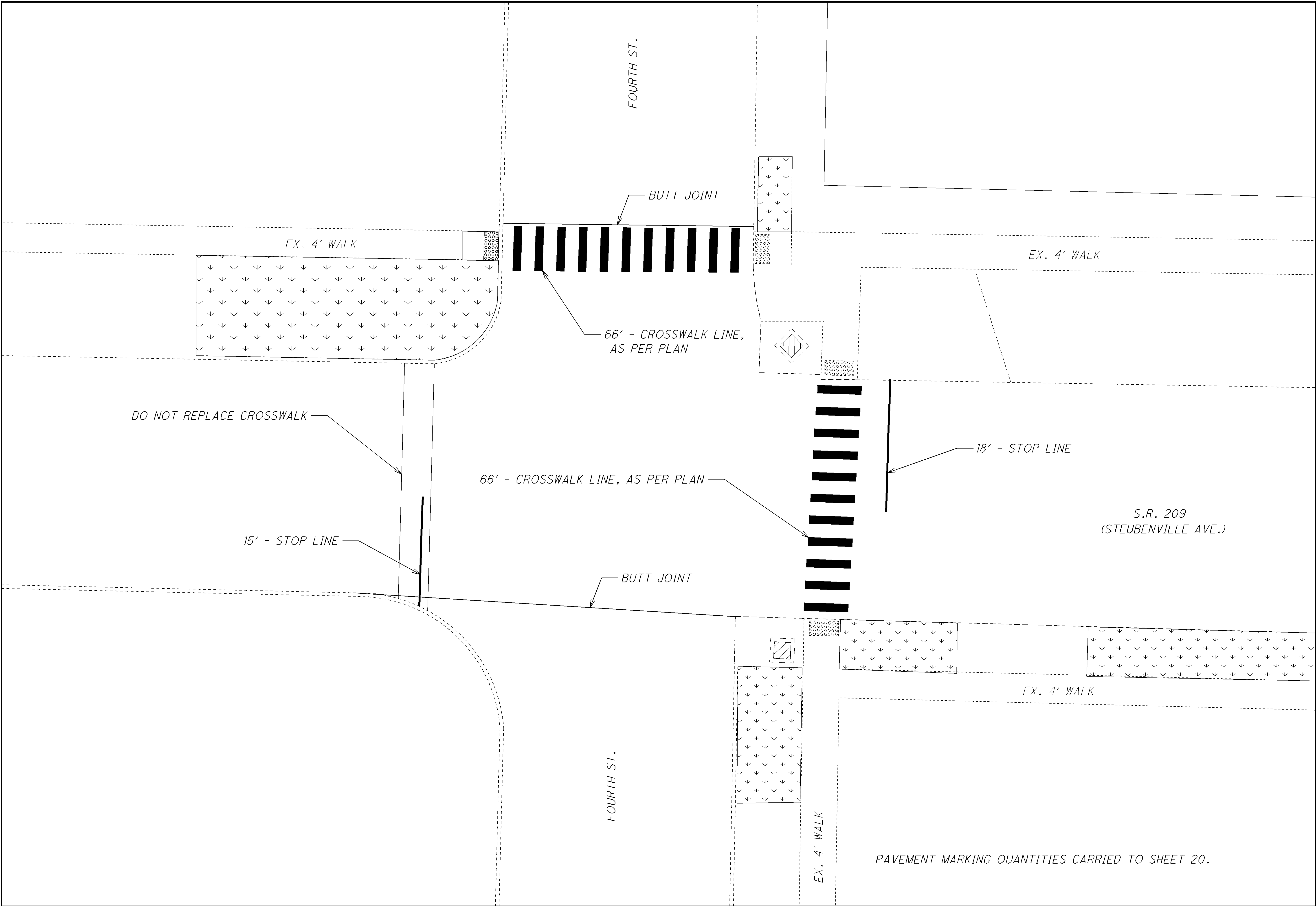
CALCULATED  
JKN  
CHECKED  
DNM

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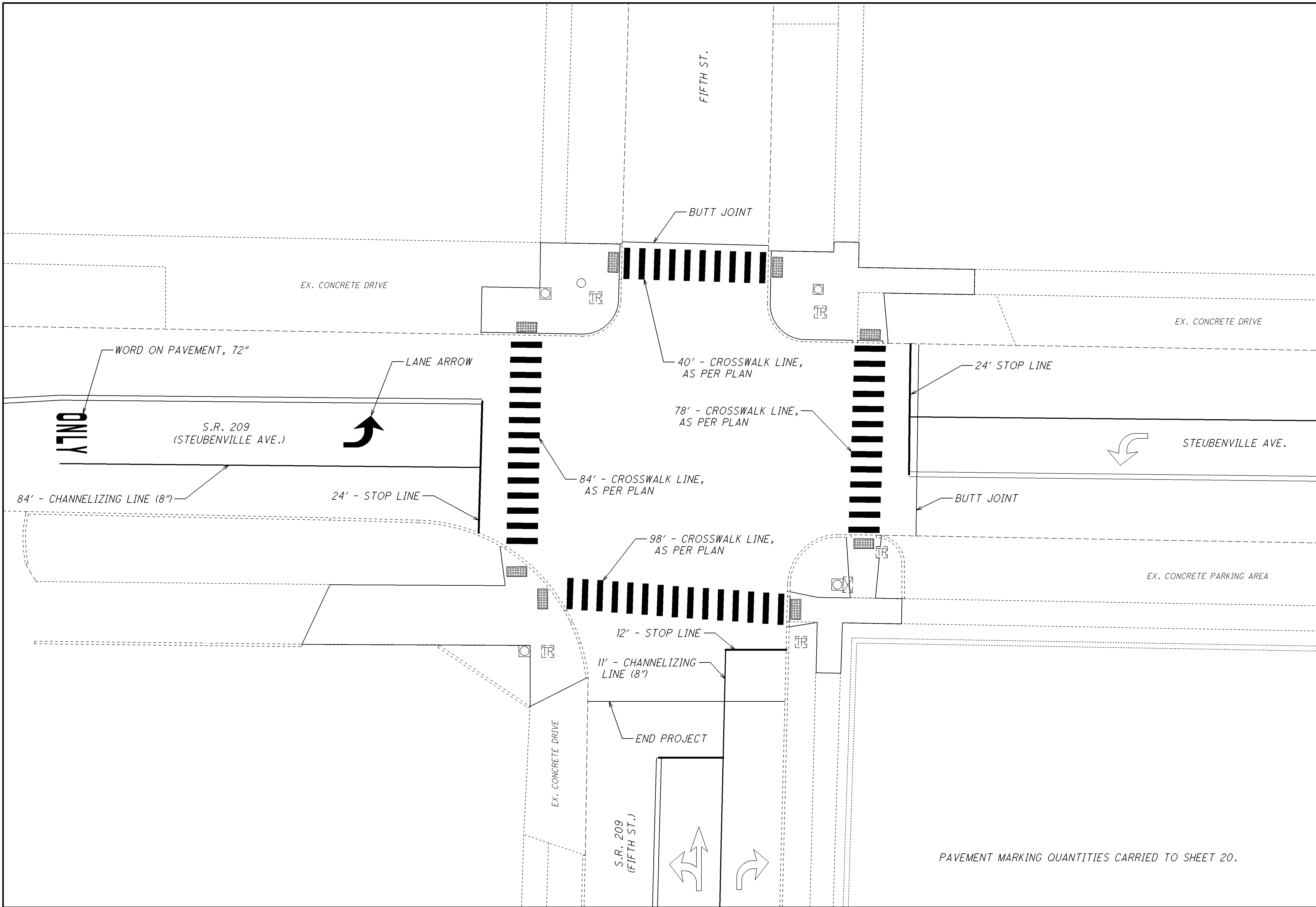
|                   |                |                   |                              |          |
|-------------------|----------------|-------------------|------------------------------|----------|
| CALCULATED<br>JKN | CHECKED<br>DNM | PAVEMENT MARKINGS | MUS-209-0.00<br>GUE-209-0.00 | 22<br>40 |
|                   |                |                   |                              |          |

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|                   |                |                   |                              |          |
|-------------------|----------------|-------------------|------------------------------|----------|
| CALCULATED<br>JKN | CHECKED<br>DNM | PAVEMENT MARKINGS | MUS-209-0.00<br>GUE-209-0.00 | 23<br>40 |
|                   |                |                   |                              |          |

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PAVEMENT MARKING QUANTITIES CARRIED TO SHEET 20.

|                   |                |                   |                              |          |
|-------------------|----------------|-------------------|------------------------------|----------|
| CALCULATED<br>JKN | CHECKED<br>DNM | PAVEMENT MARKINGS | MUS-209-0.00<br>GUE-209-0.00 | 24<br>40 |
|                   |                |                   |                              |          |

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|        |                               |
|--------|-------------------------------|
| DETAIL | SEE STD. DWG. TC-65.11        |
| 1      | ENTRANCE RAMP                 |
| 2      | EXIT RAMP                     |
| 3      | MULTI-LANE DIVIDED<br>HIGHWAY |

|        |                                       |
|--------|---------------------------------------|
| DETAIL | SEE STD. DWG. TC-65.11                |
| 4      | 4 LANE DIVIDED TO 2 LANE TRANSITION   |
| 5      | 4 LANE UNDIVIDED TO 2 LANE TRANSITION |
| 6      | ONE-LANE BRIDGE                       |
| 7      | STOP APPROACH                         |
| 8      | THROUGH APPROACH                      |
| 9      | TWO-WAY LEFT TURN LANE                |

|        |                             |
|--------|-----------------------------|
| DETAIL | SEE STD. DWG. TC-65.11      |
| 10     | APPROACH WTH LEFT-TURN LANE |
| 11     | HORIZONTAL CURVE 40'        |
| 12     | HORIZONTAL CURVE ALT.       |
| GAP    | CENTERLINE AT 80' TYP.      |

REM=REMARKS

| ITEM 621 RPM SUB-SUMMARY                   |        |          |                        |                      |        |         |        |                                         |      |                                         |                                 |
|--------------------------------------------|--------|----------|------------------------|----------------------|--------|---------|--------|-----------------------------------------|------|-----------------------------------------|---------------------------------|
| LOCATION                                   | COUNTY | ROUTE    | BEGIN LOG<br>POINT SLM | END LOG<br>POINT SLM | LENGTH |         | DETAIL | 621                                     |      | INFORMATION<br>ONLY                     | REMARKS                         |
|                                            |        |          |                        |                      |        |         |        | RAISED<br>PAVEMENT<br>MARKER<br>REMOVED | RPM  | PRISMATIC RETRO-<br>REFLECTOR<br>COLORS |                                 |
|                                            |        |          |                        |                      | MILES  | LIN.FT. |        | EACH                                    | EACH | YELLOW / YELLOW                         |                                 |
|                                            |        |          |                        |                      |        |         |        |                                         |      |                                         |                                 |
| 1                                          | MUS    | S.R. 209 | 0.00                   | 0.19                 | 0.19   | 1,003   | GAP    | 13                                      | 13   | 13                                      |                                 |
|                                            |        |          | 0.19                   | 0.44                 | 0.25   | 1,320   | 12     | 53                                      | 53   | 53                                      | PC= 0.28 PT= 0.35 L=580' DEG 11 |
|                                            |        |          | 0.44                   | 0.69                 | 0.25   | 1,320   | GAP    | 17                                      | 17   | 17                                      |                                 |
|                                            |        |          | 0.69                   | 0.93                 | 0.24   | 1,267   | 12     | 40                                      | 40   | 40                                      | PC= 0.78 PT= 0.84 L=316' DEG 13 |
|                                            |        |          | 0.93                   | 0.98                 | 0.05   | 264     | GAP    | 3                                       | 3    | 3                                       |                                 |
|                                            |        |          | 0.98                   | 1.19                 | 0.21   | 1,109   | 12     | 32                                      | 32   | 32                                      | PC= 1.07 PT= 1.10 L=158' DEG 14 |
|                                            |        |          | 1.19                   | 1.24                 | 0.05   | 264     | GAP    | 3                                       | 3    | 3                                       |                                 |
|                                            |        |          | 1.24                   | 1.52                 | 0.28   | 1,478   | 12     | 50                                      | 50   | 50                                      | PC= 1.33 PT= 1.43 L=528' DEG 11 |
|                                            |        |          | 1.52                   | 1.53                 | 0.01   | 53      | GAP    | 1                                       | 1    | 1                                       |                                 |
|                                            |        |          | 1.53                   | 1.64                 | 0.11   | 581     | 12     | 20                                      | 20   | 20                                      | PC= 1.62 PT= 1.64 L=158' DEG 22 |
|                                            |        |          |                        |                      |        |         |        |                                         |      |                                         |                                 |
| LOCATION 1 TOTALS (CARRIED TO SUB-SUMMARY) |        |          |                        |                      |        |         |        | 232                                     | 232  |                                         |                                 |

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| ITEM 621 RPM SUB-SUMMARY                   |        |          |                        |                      |        |         |        |                                         |      |                                         |                                  |
|--------------------------------------------|--------|----------|------------------------|----------------------|--------|---------|--------|-----------------------------------------|------|-----------------------------------------|----------------------------------|
| LOCATION                                   | COUNTY | ROUTE    | BEGIN LOG<br>POINT SLM | END LOG<br>POINT SLM | LENGTH |         | DETAIL | 621                                     |      | INFORMATION<br>ONLY                     | REMARKS                          |
|                                            |        |          |                        |                      |        |         |        | RAISED<br>PAVEMENT<br>MARKER<br>REMOVED | RPM  | PRISMATIC RETRO-<br>REFLECTOR<br>COLORS |                                  |
|                                            |        |          |                        |                      | MILES  | LIN.FT. |        | EACH                                    | EACH | YELLOW / YELLOW                         |                                  |
|                                            |        |          |                        |                      |        |         |        |                                         |      |                                         |                                  |
| 2                                          | GUE    | S.R. 209 | 0.00                   | 0.11                 | 0.11   | 581     | 12     | 21                                      | 21   | 21                                      | PC= 0.00 PT= 0.05 L= 264' DEG 22 |
|                                            |        |          | 0.11                   | 0.21                 | 0.10   | 528     | 11     | 13                                      | 13   | 13                                      | PC= 0.11 PT= 0.21 L= 528' DEG 9  |
|                                            |        |          | 0.21                   | 0.43                 | 0.22   | 1,162   | 12     | 43                                      | 43   | 43                                      | PC= 0.25 PT= 0.36 L= 581' DEG 10 |
|                                            |        |          | 0.43                   | 0.47                 | 0.04   | 211     | 11     | 6                                       | 6    | 6                                       | PC= 0.43 PT= 0.47 L= 211' DEG 6  |
|                                            |        |          | 0.47                   | 0.55                 | 0.08   | 422     | GAP    | 5                                       | 5    | 5                                       |                                  |
|                                            |        |          | 0.55                   | 0.62                 | 0.07   | 370     | 11     | 9                                       | 9    | 9                                       | PC= 0.55 PT= 0.62 L= 370' DEG 7  |
|                                            |        |          | 0.62                   | 0.72                 | 0.10   | 528     | GAP    | 7                                       | 7    | 7                                       |                                  |
|                                            |        |          | 0.72                   | 0.80                 | 0.08   | 422     | 11     | 11                                      | 11   | 11                                      | PC= 0.72 PT= 0.80 L= 422' DEG 9  |
|                                            |        |          | 0.80                   | 1.06                 | 0.26   | 1,373   | 12     | 49                                      | 49   | 49                                      | PC= 0.86 PT= 0.97 L= 581' DEG 12 |
|                                            |        |          | 1.06                   | 1.12                 | 0.06   | 317     | GAP    | 4                                       | 4    | 4                                       |                                  |
|                                            |        |          | 1.12                   | 1.24                 | 0.12   | 634     | 11     | 16                                      | 16   | 16                                      | PC= 1.12 PT= 1.24 L= 634' DEG 9  |
|                                            |        |          | 1.24                   | 1.42                 | 0.18   | 950     | 12     | 30                                      | 30   | 30                                      | PC= 1.28 PT= 1.33 L= 264' DEG 12 |
|                                            |        |          | 1.42                   | 1.66                 | 0.24   | 1,267   | 12     | 42                                      | 42   | 42                                      | PC= 1.50 PT= 1.57 L= 370' DEG 12 |
|                                            |        |          | 1.66                   | 1.83                 | 0.17   | 898     | 12     | 31                                      | 31   | 31                                      | PC= 1.68 PT= 1.74 L= 317' DEG 14 |
|                                            |        |          | 1.83                   | 2.08                 | 0.25   | 1,320   | 12     | 41                                      | 41   | 41                                      | PC= 1.93 PT= 1.99 L= 317' DEG 13 |
|                                            |        |          | 2.08                   | 2.17                 | 0.09   | 475     | GAP    | 6                                       | 6    | 6                                       |                                  |
|                                            |        |          | 2.17                   | 2.36                 | 0.19   | 1,003   | 12     | 36                                      | 36   | 36                                      | PC= 2.26 PT= 2.34 L= 422' DEG 15 |
|                                            |        |          | 2.36                   | 2.46                 | 0.10   | 528     | 12     | 20                                      | 20   | 20                                      | PC= 2.36 PT= 2.41 L= 264' DEG 17 |
|                                            |        |          | 2.46                   | 2.59                 | 0.13   | 686     | 11     | 17                                      | 17   | 17                                      | PC= 2.46 PT= 2.59 L= 686' DEG 9  |
|                                            |        |          | 2.59                   | 2.62                 | 0.03   | 158     | GAP    | 2                                       | 2    | 2                                       |                                  |
|                                            |        |          | 2.62                   | 2.76                 | 0.14   | 739     | 11     | 18                                      | 18   | 18                                      | PC= 2.62 PT= 2.76 L= 739' DEG 9  |
|                                            |        |          | 2.76                   | 2.80                 | 0.04   | 211     | GAP    | 3                                       | 3    | 3                                       |                                  |
|                                            |        |          | 2.80                   | 3.03                 | 0.23   | 1,214   | 12     | 37                                      | 37   | 37                                      | PC= 2.89 PT= 2.94 L= 264' DEG 10 |
|                                            |        |          | 3.03                   | 3.09                 | 0.06   | 317     | GAP    | 4                                       | 4    | 4                                       |                                  |
|                                            |        |          | 3.09                   | 3.12                 | 0.03   | 158     | 11     | 4                                       | 4    | 4                                       | PC= 3.09 PT= 3.12 L= 158' DEG 8  |
|                                            |        |          | 3.12                   | 3.33                 | 0.21   | 1,109   | 12     | 35                                      | 35   | 35                                      | PC= 3.19 PT= 3.25 L= 317' DEG 21 |
|                                            |        |          | 3.33                   | 3.40                 | 0.07   | 370     | 11     | 9                                       | 9    | 9                                       | PC= 3.33 PT= 3.40 L= 369' DEG 9  |
|                                            |        |          | 3.40                   | 3.56                 | 0.16   | 845     | 12     | 33                                      | 33   | 33                                      | PC= 3.43 PT= 3.52 L= 475' DEG 12 |
|                                            |        |          | 3.56                   | 3.68                 | 0.12   | 634     | 12     | 26                                      | 26   | 26                                      | PC= 3.56 PT= 3.64 L= 422' DEG 14 |
|                                            |        |          | 3.68                   | 3.96                 | 0.28   | 1,478   | 11     | 37                                      | 37   | 37                                      | PC= 3.68 PT= 3.96 L= 1478' DEG 4 |
|                                            |        |          | 3.96                   | 4.28                 | 0.32   | 1,690   | GAP    | 21                                      | 21   | 21                                      |                                  |
|                                            |        |          | 4.28                   | 4.33                 | 0.05   | 264     | 11     | 7                                       | 7    | 7                                       | PC= 4.28 PT= 4.33 L= 264' DEG 8  |
|                                            |        |          | 4.33                   | 5.54                 | 1.21   | 6,389   | GAP    | 80                                      | 80   | 80                                      |                                  |
| LOCATION 2 TOTALS (CARRIED TO SUB-SUMMARY) |        |          |                        |                      |        |         |        | 723                                     | 723  |                                         |                                  |

CALCULATED  
JKIN

CHECKED  
DNM

RAISED PAVEMENT MARKER DATA

MUS - 209 - 0.00  
GUE - 209 - 0.00

26  
40

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| ITEM 621 RPM SUB-SUMMARY                   |                            |                       |                                                                              |                                                                    |                            |         |                            |                                |      |                                  |                                  |
|--------------------------------------------|----------------------------|-----------------------|------------------------------------------------------------------------------|--------------------------------------------------------------------|----------------------------|---------|----------------------------|--------------------------------|------|----------------------------------|----------------------------------|
| L<br>O<br>C<br>A<br>T<br>I<br>O<br>N       | C<br>O<br>U<br>N<br>T<br>Y | R<br>O<br>U<br>T<br>E | B<br>E<br>G<br>I<br>N<br>L<br>O<br>G<br>P<br>O<br>I<br>N<br>T<br>S<br>L<br>M | E<br>N<br>D<br>L<br>O<br>G<br>P<br>O<br>I<br>N<br>T<br>S<br>L<br>M | L<br>E<br>N<br>G<br>T<br>H |         | D<br>E<br>T<br>A<br>I<br>L | 621                            |      | INFORMATION ONLY                 | R<br>E<br>M<br>A<br>R<br>K<br>S  |
|                                            |                            |                       |                                                                              |                                                                    |                            |         |                            | RAISED PAVEMENT MARKER REMOVED | RPM  | PRISMATIC RETRO-REFLECTOR COLORS |                                  |
|                                            |                            |                       |                                                                              |                                                                    | MILES                      | LIN.FT. |                            | EACH                           | EACH | YELLOW / YELLOW                  |                                  |
|                                            |                            |                       |                                                                              |                                                                    |                            |         |                            |                                |      |                                  |                                  |
| 3                                          | GUE                        | S.R. 209              | 5.54                                                                         | 5.58                                                               | 0.04                       | 211     | GAP                        | 3                              | 3    | 3                                |                                  |
|                                            |                            |                       | 5.58                                                                         | 5.76                                                               | 0.18                       | 950     | 11                         | 24                             | 24   | 24                               | PC= 5.58 PT= 5.76 L= 950' DEG 5  |
|                                            |                            |                       | 5.76                                                                         | 5.79                                                               | 0.03                       | 158     | GAP                        | 2                              | 2    | 2                                |                                  |
|                                            |                            |                       | 5.79                                                                         | 5.85                                                               | 0.06                       | 317     | 11                         | 8                              | 8    | 8                                | PC= 5.79 PT= 5.85 L= 317' DEG 6  |
|                                            |                            |                       | 5.85                                                                         | 6.01                                                               | 0.16                       | 845     | GAP                        | 11                             | 11   | 11                               |                                  |
|                                            |                            |                       | 6.01                                                                         | 6.20                                                               | 0.19                       | 1,003   | 12                         | 35                             | 35   | 35                               | PC= 6.10 PT= 6.17 L= 370' DEG 11 |
|                                            |                            |                       | 6.20                                                                         | 6.28                                                               | 0.08                       | 422     | 12                         | 15                             | 15   | 15                               | PC= 6.20 PT= 6.23 L= 158' DEG 16 |
|                                            |                            |                       | 6.28                                                                         | 6.31                                                               | 0.03                       | 158     | 11                         | 4                              | 4    | 4                                | PC= 6.28 PT= 6.31 L= 158' DEG 3  |
|                                            |                            |                       | 6.31                                                                         | 6.56                                                               | 0.25                       | 1,320   | 12                         | 46                             | 46   | 46                               | PC= 6.37 PT= 6.47 L= 528' DEG 11 |
|                                            |                            |                       | 6.56                                                                         | 6.59                                                               | 0.03                       | 158     | GAP                        | 2                              | 2    | 2                                |                                  |
|                                            |                            |                       | 6.59                                                                         | 6.62                                                               | 0.03                       | 158     | 11                         | 4                              | 4    | 4                                | PC= 6.59 PT= 6.62 L= 158' DEG 8  |
|                                            |                            |                       | 6.62                                                                         | 6.71                                                               | 0.09                       | 475     | GAP                        | 6                              | 6    | 6                                |                                  |
|                                            |                            |                       | 6.71                                                                         | 6.76                                                               | 0.05                       | 264     | 11                         | 7                              | 7    | 7                                | PC= 6.71 PT= 6.76 L= 264' DEG 12 |
|                                            |                            |                       | 6.76                                                                         | 7.07                                                               | 0.31                       | 1,637   | GAP                        | 22                             | 22   | 22                               |                                  |
|                                            |                            |                       |                                                                              |                                                                    |                            |         |                            |                                |      |                                  |                                  |
| LOCATION 3 TOTALS (CARRIED TO SUB-SUMMARY) |                            |                       |                                                                              |                                                                    |                            |         |                            | 189                            | 189  |                                  |                                  |
|                                            |                            |                       |                                                                              |                                                                    |                            |         |                            |                                |      |                                  |                                  |
| 4                                          | GUE                        | S.R. 209              | 7.07                                                                         | 7.44                                                               | 0.37                       | 1,954   | GAP                        | 24                             | 24   | 24                               |                                  |
|                                            |                            |                       | 7.44                                                                         | 7.64                                                               | 0.20                       | 1,056   | 12                         | 32                             | 32   | 32                               | PC= 7.53 PT= 7.56 L= 158' DEG 13 |
|                                            |                            |                       |                                                                              |                                                                    |                            |         |                            |                                |      |                                  |                                  |
| LOCATION 4 TOTALS (CARRIED TO SUB-SUMMARY) |                            |                       |                                                                              |                                                                    |                            |         |                            | 56                             | 56   |                                  |                                  |

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\* MAX 12:1 SLOPE  
CURB RAMP LANDING AREA  
SEE SHEETS 8-10

EX. CONCRETE PARKING AREA

PLACE DETECTABLE WARNING, REMOVE AND  
REPLACE WALK. REMOVE AND REPLACE 9' OF  
CURB, TYPE 6.

CURB, TYPE 6, 9.0 LF

DECORATIVE ROCK BED  
DO NOT DISTURB

FIRST ST.

PLACE DETECTABLE WARNING, REMOVE AND  
REPLACE 8' x 5' WALK.

EX. CONCRETE PARKING AREA

S.R. 209  
(STEUBENVILLE AVE.)

FOR CURB RAMP QUANTITIES, SEE SHEET 32

\* MAX 12:1 SLOPE  
CURB RAMP LANDING AREA  
SEE SHEETS 8-10

PLACE DETECTABLE WARNING, REMOVE AND  
REPLACE WALK. REMOVE AND REPLACE 14'  
OF CURB, TYPE 6.

CURB, TYPE 6, 26.0 LF

CURB, TYPE 6, 14.0 LF

EX. 9.5' BRICK WALKWAY  
DO NOT DISTURB

SECOND ST.

PLACE CURB RAMP, TYPE B2. EXTRA WALK  
PROVIDED TO TIE INTO EXISTING WALK.  
REMOVE AND REPLACE 26' OF CURB, TYPE 6.

CURB, TYPE 6, 15.0 LF

EX. 5' WALK

S.R. 209  
(STEUBENVILLE AVE.)

FOR CURB RAMP QUANTITIES, SEE SHEET 32

CURB RAMP DETAILS

MUS-209-0.00  
GUE-209-0.00

28  
40

CALCULATED  
JKN  
CHECKED  
DNM

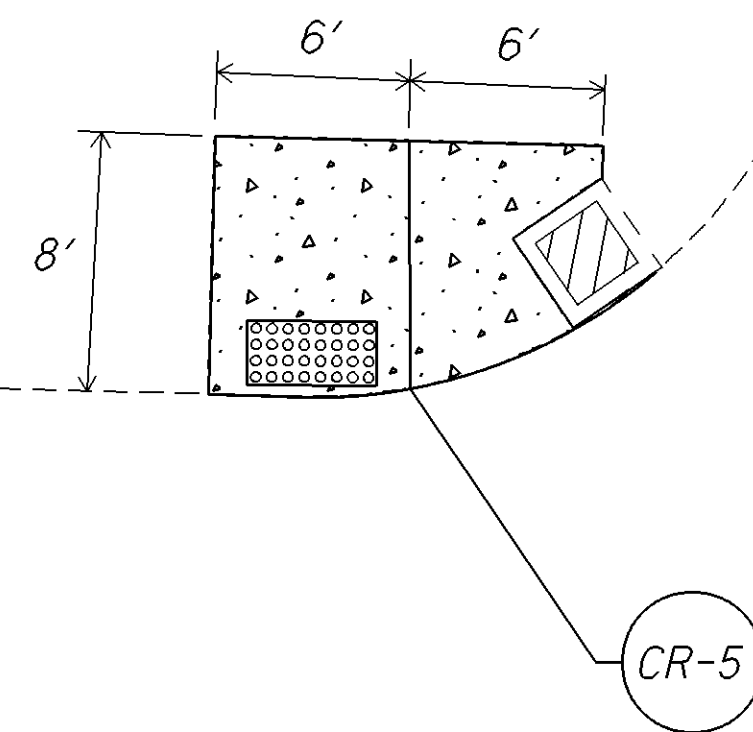
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 - CURB RAMP LANDING AREA  
SEE SHEETS 8-10

\* MAX 12:1 SLOPE

EX. CONCRETE PARKING AREA

PLACE DETECTABLE WARNING, REMOVE AND  
REPLACE WALK SHOWN.



THIRD ST.

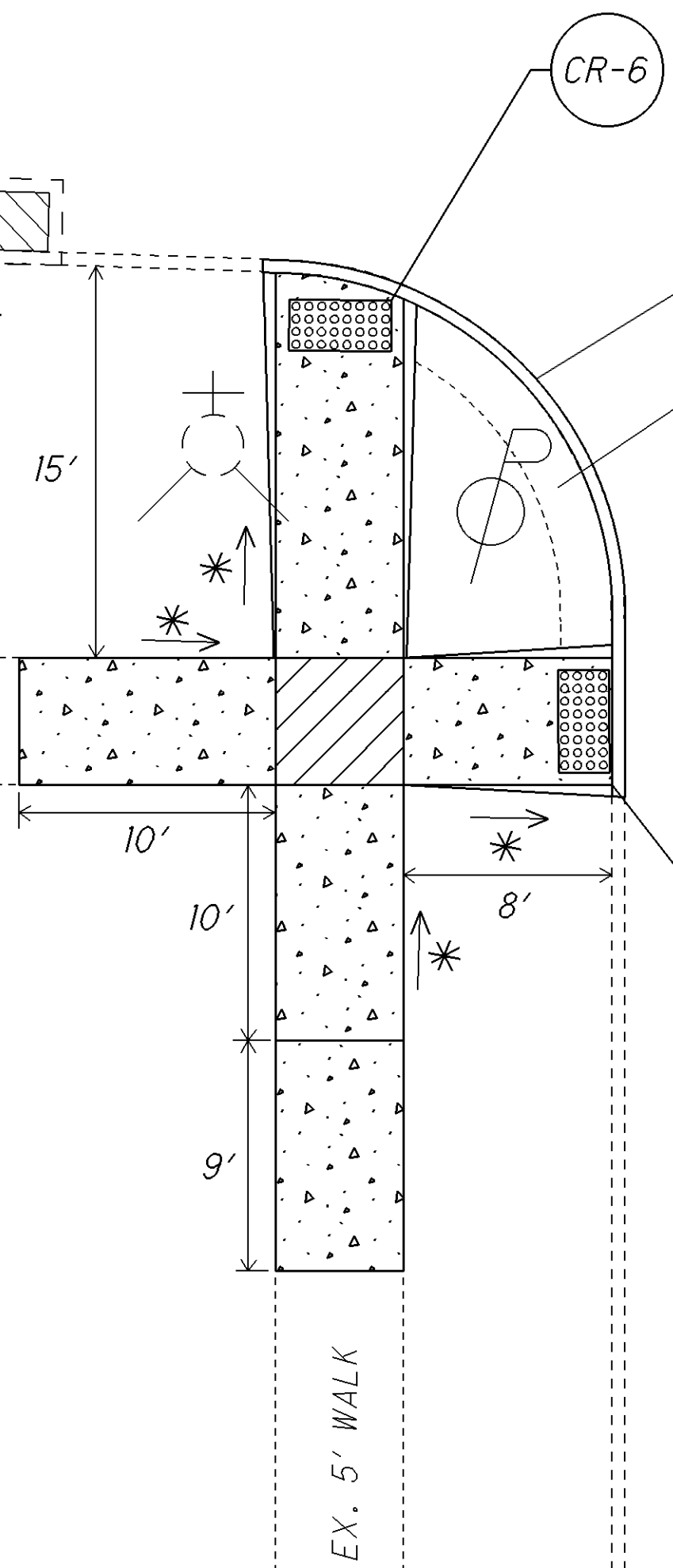
EX. BUILDING

EX. CONCRETE WALK

S.R. 209  
(STEUBENVILLE AVE)

CATCH BASIN RECONSTRUCTED TO GRADE

PLACE 2 CURB RAMPS, TYPE A2. USE  
EXTRA WALK PROVIDED TO LOWER  
LANDING AREA AND MEET MAXIMUM  
SLOPE OF 12:1. REPLACE EXTRA 9'  
PANEL PARALLEL TO THIRD STREET  
TO REPAIR DAMAGE CAUSED BY  
TREE ROOTS.



CURB, TYPE 6, 30 LF

PLACE TOPSOIL IN EXISTING  
CONCRETE AREA

CURB, TYPE 6, 5 LF

EX. 5' WALK

EX. BUILDING

EX. 5' WALK

THIRD ST.

CR-7

CR-8

PLACE CURB RAMP, TYPE A2. EXTRA WALK  
PROVIDED TO TIE INTO EXISTING WALK.

EX. 4' WALK

FOR CURB RAMP QUANTITIES, SEE SHEET 32

CURB RAMP DETAILS

MUS-209-0.00  
GUE-209-0.00

29  
40

CALCULATED  
JKN  
CHECKED  
DNM

EX. 4' WALK

$$(CR-9$$

—(CR-10)

FOURTH ST.

FOURTH ST.

FOR CURB RAMP QUANTITIES, SEE SHEET 32

EX. WALK AND DETECTABLE  
WARNINGS. DO NOT DISTURB.

— EXISTING CATCH BASIN

S.R. 209  
(STEUBENVILLE AVE.)

- EXISTING CATCH BASIN

EX. WALK AND DETECTABLE  
WARNINGS. DO NOT DISTURB.

**CURB RAMP DETAILS**

|              |
|--------------|
| MUS-209-0.00 |
| GUE-209-0.00 |

|            |     |
|------------|-----|
| CALCULATED | JKN |
| CHECKED    | DNM |

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 - CURB RAMP LANDING AREA  
SEE SHEETS 8-10

\* MAX 12:1 SLOPE

PLACE DETECTABLE WARNINGS. REMOVE AND REPLACE  
366 SQ FT OF WALK. DO NOT DISTURB PULL BOX,  
UTILITY POLE, OR SIGNAL POLE FOUNDATION.  
PLACE 42 LF OF NEW CURB, TYPE 6.

CR-14 : PLACE DETECTABLE WARNING.  
CR-15 : PLACE CURB RAMP, TYPE A2.  
REMOVE 399.5 SQ FT OF WALK AND REPLACE 344 SQ FT  
OF WALK. DO NOT DISTURB PULL BOX OR SIGNAL POLE  
FOUNDATION. PLACE 38 LF OF CURB, TYPE 6.

EX. CONCRETE DRIVE

EX. 5' WALK

FIFTH ST.

EX. 5' WALK

EX. 5' WALK

CURB, TYPE 6, 38 LF  
7.5' RADIUS

CURB, TYPE 6, 42 LF  
7.5' RADIUS

UTILITY POLE  
FOUNDATION  
REMOVED

S.R. 209  
(STEUBENVILLE AVE)

STEUBENVILLE AVE

FULL DEPTH PAVEMENT SAWING, 86 LF  
8.5' RADIUS

CURB, TYPE 6, 69 LF  
35' RADIUS

PAVEMENT REMOVED, APPROX. 9" THICK  
PORTLAND CEMENT CONCRETE. PLACE  
TOPSOIL IN PREVIOUS DRIVE AREA NOT  
USED AS NEW 4" CONCRETE WALK.

EX. 9' WALK

PLACE DETECTABLE WARNINGS. REMOVE AND REPLACE 360 SQ FT OF WALK.  
PLACE 347 SQ FT OF 4" CONCRETE WALK IN PREVIOUS DRIVE AREA AS SHOWN.  
DO NOT DISTURB PULL BOX. REMOVE 16 LF OF CURB AND PLACE 69 LF OF  
CURB, TYPE 6, CLOSING OFF PREVIOUS DRIVE AREA.

QUANTITIES FOR NEW RADIUS

AREA TAKEN FROM MICROSTATION: 249.5 SQ FT

EXCAVATION

DEPTH: 12"

$249.5 \text{ SF} \times 1 \text{ FT} = 249.5 \text{ CF} = 9.24 \text{ CY}$

SUBGRADE COMPACTION

$(249.5 \text{ SF}) / (9 \text{ SF/SY}) = 27.78 \text{ SY}$

302 ASPHALT BASE

DEPTH: 12"

$249.5 \text{ SF} \times 1 \text{ FT} = 249.5 \text{ CF} = 9.24 \text{ CY}$

NEW RADIUS PAVEMENT DETAIL  
NOT TO SCALE

COMPACTED  
SUBGRADE

1.25" SURFACE COURSE  
SAME AS ROADWAY

1.00" INTERMEDIATE COURSE  
SAME AS ROADWAY

12" 302 ASPHALT BASE

EX. CONCRETE DRIVE

END PROJECT

UTILITY POLE  
FOUNDATION  
REMOVED

CURB, TYPE 6, 32 LF  
10' RADIUS

CR-16

CR-17

EX. CONCRETE PARKING AREA

EX. 5' WALK

PLACE 2 CURB RAMPS, TYPE A2. USE EXTRA WALK  
PROVIDED TO LOWER RAMP LANDING AREA AND MEET  
MAXIMUM SLOPE OF 12:1. DO NOT DISTURB PULL BOX  
OR POLE MOUNTED SIGNAL CABINET. REMOVE AND  
REPLACE 32 LF OF CURB, TYPE 6.

EX. 5' WALK

S.R. 209  
(FIFTH ST.)

FOR QUANTITIES, SEE SHEET 32

CURB RAMP DETAILS

MUS-209-0.00  
GUE-209-0.00

31  
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CALCULATED  
JKN  
CHECKED  
DNM

| CURB RAMP DATA                             |           |             |        |                  |              |              |                                    |            |                        |                               |              |                                       |                                        |              |                               |         |                                      |                             |
|--------------------------------------------|-----------|-------------|--------|------------------|--------------|--------------|------------------------------------|------------|------------------------|-------------------------------|--------------|---------------------------------------|----------------------------------------|--------------|-------------------------------|---------|--------------------------------------|-----------------------------|
| REFERENCE NO.                              | SHEET NO. | LOCATION    | SIDE   | 202              |              |              |                                    | 203        | 204                    | 252                           | 302          | 608                                   |                                        | 609          | 690                           |         | SPECIAL MISC.:<br>DETECTABLE WARNING | COMMENTS                    |
|                                            |           |             |        | PAVEMENT REMOVED | WALK REMOVED | CURB REMOVED | UTILITY POLE<br>FOUNDATION REMOVED | EXCAVATION | SUBGRADE<br>COMPACTION | FULL DEPTH PAVEMENT<br>SAWING | ASPHALT BASE | 4" CONCRETE WALK,<br>(CURB RAMP AREA) | 4" CONCRETE WALK,<br>(EXTRA WALK AREA) | CURB, TYPE 6 | SPECIAL - MISC:<br>CURB RAMP, |         |                                      |                             |
|                                            |           |             |        |                  |              |              |                                    |            |                        |                               |              |                                       |                                        |              | TYPE A2                       | TYPE B2 |                                      |                             |
|                                            |           |             | Lt/Rt. | SQ. YD.          | SQ. FT.      | FT.          | EACH                               | CU. YD.    | SQ. YD.                | FT.                           | CU. YD.      | SQ. FT.                               | SQ. FT.                                | FT.          | EACH                          | EACH    | SQ. FT.                              |                             |
|                                            |           |             |        |                  |              |              |                                    |            |                        |                               |              |                                       |                                        |              |                               |         |                                      |                             |
| CR-1                                       | 24        | N FIRST ST  | LT     |                  | 42.0         | 9.0          |                                    |            |                        |                               |              | 34.0                                  |                                        | 9.0          |                               |         | 8.0                                  | Add Detectable Warning      |
| CR-2                                       | 24        | N FIRST ST  | LT     |                  | 44.0         |              |                                    |            |                        |                               |              | 36.0                                  |                                        |              |                               |         | 8.0                                  | Add Detectable Warning      |
| CR-3                                       | 24        | N SECOND ST | LT     |                  | 80.0         | 14.0         |                                    |            |                        |                               |              | 72.0                                  |                                        | 14.0         |                               |         | 8.0                                  | Add Detectable Warning      |
| CR-4                                       | 24        | N SECOND ST | LT     |                  | 155.5        | 26.0         |                                    |            |                        |                               |              | 106.0                                 | 49.5                                   | 41.0         |                               | 1       |                                      | New Curb Ramp               |
| CR-5                                       | 25        | THIRD ST    | LT     |                  | 80.0         |              |                                    |            |                        |                               |              | 40.0                                  | 32.0                                   |              |                               |         | 8.0                                  | Add Detectable Warning      |
| CR-6                                       | 25        | THIRD ST    | RT     |                  | 169.0        | 15.0         |                                    |            |                        |                               |              | 74.0                                  | 95.0                                   | 15.0         | 1                             |         |                                      | New Curb Ramp               |
| CR-7                                       | 25        | THIRD ST    | RT     |                  | 115.0        | 15.0         |                                    |            |                        |                               |              | 40.0                                  | 75.0                                   | 15.0         | 1                             |         |                                      | New Curb Ramp               |
| CR-8                                       | 25        | THIRD ST    | RT     |                  | 44.0         | 5.0          |                                    |            |                        |                               |              | 22.0                                  | 44.0                                   | 5.0          | 1                             |         |                                      | New Curb Ramp               |
| CR-9                                       | 26        | FOURTH ST   | LT     |                  | 52.0         |              |                                    |            |                        |                               |              |                                       |                                        |              |                               |         |                                      | Remove Walk, Do Not Replace |
| CR-10                                      | 26        | FOURTH ST   | LT     |                  | 20.0         |              |                                    |            |                        |                               |              | 12.0                                  |                                        |              |                               |         | 8.0                                  | Add Detectable Warning      |
| CR-11                                      | 28        | FIFTH ST    | RT     | 84.0             | 402.0        | 16.0         | 1                                  | 9.3        | 27.8                   | 86.0                          | 9.3          | 61.0                                  | 749.0                                  | 69.0         |                               |         | 16.0                                 | Add Detectable Warnings     |
| CR-12                                      | 28        | FIFTH ST    | LT     |                  | 106.0        |              |                                    |            |                        |                               |              | 17.0                                  | 81.0                                   | 21.0         |                               |         | 8.0                                  | Add Detectable Warning      |
| CR-13                                      | 28        | FIFTH ST    | LT     |                  | 260.0        |              |                                    |            |                        |                               |              | 44.5                                  | 207.5                                  | 21.0         |                               |         | 8.0                                  | Add Detectable Warning      |
| CR-14                                      | 28        | FIFTH ST    | LT     |                  | 227.5        |              |                                    |            |                        |                               |              | 47.5                                  | 172.0                                  | 19.0         |                               |         | 8.0                                  | Add Detectable Warning      |
| CR-15                                      | 28        | FIFTH ST    | LT     |                  | 172.0        |              | 1                                  |            |                        |                               |              | 45.0                                  | 172.0                                  | 19.0         | 1                             |         |                                      | New Curb Ramp               |
| CR-16                                      | 28        | FIFTH ST    | LT     |                  | 121.5        | 16.0         |                                    |            |                        |                               |              | 60.0                                  | 121.5                                  | 16.0         | 1                             |         |                                      | New Curb Ramp               |
| CR-17                                      | 28        | FIFTH ST    | LT     |                  | 150.0        | 16.0         |                                    |            |                        |                               |              | 28.0                                  | 121.0                                  | 16.0         | 1                             |         |                                      | New Curb Ramp               |
|                                            |           |             |        |                  |              |              |                                    |            |                        |                               |              |                                       |                                        |              |                               |         |                                      |                             |
| SUBTOTALS                                  |           |             |        |                  |              |              |                                    |            |                        |                               |              | 739.0                                 | 1919.5                                 |              |                               |         |                                      |                             |
| LOCATION 5 TOTALS (CARRIED TO SUB-SUMMARY) |           |             |        | 84.0             | 2240.5       | 132.0        | 2                                  | 9.3        | 27.8                   | 86.0                          | 9.3          | 2658.5                                |                                        | 280.0        | 6                             | 1       | 80.0                                 |                             |

| LOCATION 1 SHEET TOTALS |     |    |     |        |       |       |      |     |     | ITEM | ITEM EXT. | GRAND TOTALS | UNIT   | DESCRIPTION                                            |
|-------------------------|-----|----|-----|--------|-------|-------|------|-----|-----|------|-----------|--------------|--------|--------------------------------------------------------|
| 2                       | 3   | 4  | 5   | 12     | 13    | 14    | 18   | 19  | 25  |      |           |              |        |                                                        |
|                         |     |    |     |        |       |       |      |     |     |      |           |              |        |                                                        |
|                         |     |    |     |        |       |       |      |     |     |      |           |              |        | ROADWAY                                                |
|                         | 460 |    |     |        |       | 1,109 |      |     |     | 202  | 23500     | 1,569        | SQ YD  | WEARING COURSE REMOVED                                 |
|                         |     |    |     |        | 3.28  |       |      |     |     | 209  | 72051     | 3.28         | MILE   | PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN    |
|                         |     |    |     |        |       |       |      |     |     |      |           |              |        | PAVEMENT                                               |
| 778                     |     |    |     |        |       |       |      |     |     | 253  | 02000     | 778.0        | CU YD  | PAVEMENT REPAIR                                        |
|                         |     |    |     | 19,243 |       |       |      |     |     | 254  | 01000     | 19,243       | SQ YD  | PAVEMENT PLANING, ASPHALT CONCRETE                     |
|                         | 4   |    |     |        |       |       |      |     |     | 304  | 20000     | 4            | CU YD  | AGGREGATE BASE                                         |
|                         |     |    |     | 1,444  |       | 84    |      |     |     | 407  | 10000     | 1,528        | GALLON | TACK COAT                                              |
|                         |     |    |     | 963    |       | 56    |      |     |     | 407  | 14000     | 1,019        | GALLON | TACK COAT FOR INTERMEDIATE COURSE                      |
|                         |     |    |     |        | 1,540 |       |      |     |     | 408  | 10001     | 1540         | GALLON | PRME COAT, AS PER PLAN                                 |
|                         | 16  | 30 |     | 669    |       | 39    |      |     |     | 441  | 50100     | 754          | CU YD  | ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), 70-22M |
|                         | 8   |    |     | 535    |       | 16    |      |     |     | 441  | 50200     | 559          | CU YD  | ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448)    |
|                         |     |    |     |        | 241   |       |      |     |     | 617  | 10101     | 241          | CU YD  | COMPACTED AGGREGATE, AS PER PLAN                       |
|                         |     |    |     |        |       |       |      |     |     |      |           |              |        | TRAFFIC CONTROL                                        |
|                         |     |    |     |        |       |       |      |     | 232 | 621  | 00100     | 232          | EACH   | RPM                                                    |
|                         |     |    |     |        |       |       |      |     | 232 | 621  | 54000     | 232          | EACH   | RAISED PAVEMENT MARKER REMOVED                         |
|                         |     |    |     |        |       |       |      | 115 |     | 644  | 00500     | 115          | FT     | STOP LINE                                              |
|                         |     |    |     |        |       |       | 3.28 |     |     | 648  | 00100     | 3.28         | MILE   | EDGE LINE, 4"                                          |
|                         |     |    |     |        |       |       | 1.64 |     |     | 648  | 00300     | 1.64         | MILE   | CENTER LINE                                            |
|                         |     |    |     |        |       |       |      |     |     |      |           |              |        | MAINTENANCE OF TRAFFIC                                 |
|                         |     |    | 14  |        |       |       |      |     |     | 614  | 12460     | 14           | EACH   | WORK ZONE MARKING SIGN                                 |
|                         |     |    | 0.4 |        |       |       |      |     |     | 614  | 13000     | 0.4          | CU YD  | ASPHALT CONCRETE FOR MAINTAINING TRAFFIC               |
|                         |     |    |     | 3.28   |       |       |      |     |     | 614  | 21400     | 3.28         | MILE   | WORK ZONE CENTER LINE, CLASS II                        |

LOCATION 1 SUB-SUMMARY

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GUE-209-0.00

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| LOCATION 2 SHEET TOTALS |       |     |    |        |       |       |       |     |     | ITEM | ITEM EXT. | GRAND TOTALS | UNIT   | DESCRIPTION                                            |
|-------------------------|-------|-----|----|--------|-------|-------|-------|-----|-----|------|-----------|--------------|--------|--------------------------------------------------------|
| 2                       | 3     | 4   | 5  | 12     | 13    | 14    | 18    | 19  | 26  |      |           |              |        |                                                        |
|                         |       |     |    |        |       |       |       |     |     |      |           |              |        |                                                        |
|                         | 1,390 |     |    |        |       | 2,117 |       |     |     | 202  | 23500     | 3,507        | SQ YD  | ROADWAY                                                |
|                         |       |     |    |        |       |       |       |     |     |      |           |              |        | WEARING COURSE REMOVED                                 |
|                         |       |     |    |        | 11.08 |       |       |     |     | 209  | 72051     | 11.08        | MILE   | PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN    |
|                         |       |     |    |        |       |       |       |     |     |      |           |              |        |                                                        |
| 2,075                   |       |     |    |        |       |       |       |     |     | 253  | 02000     | 2,075.0      | CU YD  | PAVEMENT                                               |
|                         |       |     |    |        |       |       |       |     |     |      |           |              |        | PAVEMENT REPAIR                                        |
|                         |       |     |    | 65,003 |       |       |       |     |     | 254  | 01000     | 65,003       | SQ YD  | PAVEMENT PLANING, ASPHALT CONCRETE                     |
|                         |       |     |    |        |       |       |       |     |     |      |           |              |        |                                                        |
|                         | 9     |     |    |        |       |       |       |     |     | 304  | 20000     | 9            | CU YD  | AGGREGATE BASE                                         |
|                         |       |     |    |        |       |       |       |     |     |      |           |              |        |                                                        |
|                         |       |     |    | 4,876  |       | 160   |       |     |     | 407  | 10000     | 5,036        | GALLON | TACK COAT                                              |
|                         |       |     |    | 3,251  |       | 107   |       |     |     | 407  | 14000     | 3,358        | GALLON | TACK COAT FOR INTERMEDIATE COURSE                      |
|                         |       |     |    |        |       |       |       |     |     |      |           |              |        |                                                        |
|                         |       |     |    |        | 5,201 |       |       |     |     | 408  | 10001     | 5,201        | GALLON | PRIME COAT, AS PER PLAN                                |
|                         |       |     |    |        |       |       |       |     |     |      |           |              |        |                                                        |
|                         | 49    | 101 |    | 2,258  |       | 74    |       |     |     | 441  | 50100     | 2,482        | CU YD  | ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), 70-22M |
|                         | 28    |     |    | 1,806  |       | 31    |       |     |     | 441  | 50200     | 1,865        | CU YD  | ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448)    |
|                         |       |     |    |        |       |       |       |     |     |      |           |              |        |                                                        |
|                         |       |     |    |        | 813   |       |       |     |     | 617  | 10101     | 813          | CU YD  | COMPACTED AGGREGATE, AS PER PLAN                       |
|                         |       |     |    |        |       |       |       |     |     |      |           |              |        |                                                        |
|                         |       |     |    |        |       |       |       |     | 723 | 621  | 00100     | 723          | EACH   | TRAFFIC CONTROL                                        |
|                         |       |     |    |        |       |       |       |     | 723 | 621  | 54000     | 723          | EACH   | RPM                                                    |
|                         |       |     |    |        |       |       |       |     |     |      |           |              |        | RAISED PAVEMENT MARKER REMOVED                         |
|                         |       |     |    |        |       |       |       | 295 |     | 644  | 00500     | 295          | FT     |                                                        |
|                         |       |     |    |        |       |       |       |     |     |      |           |              |        | STOP LINE                                              |
|                         |       |     |    |        |       |       | 11.08 |     |     | 648  | 00100     | 11.08        | MILE   |                                                        |
|                         |       |     |    |        |       |       | 5.54  |     |     | 648  | 00300     | 5.54         | MILE   | EDGE LINE, 4"                                          |
|                         |       |     |    |        |       |       |       |     |     |      |           |              |        | CENTER LINE                                            |
|                         |       |     |    |        |       |       |       |     |     |      |           |              |        |                                                        |
|                         |       |     | 58 |        |       |       |       |     |     |      |           |              |        | MAINTENANCE OF TRAFFIC                                 |
|                         |       |     |    |        |       |       |       |     |     | 614  | 12460     | 58           | EACH   | WORK ZONE MARKING SIGN                                 |
|                         |       |     |    | 11.08  |       |       |       |     |     | 614  | 21400     | 11.08        | MILE   | WORK ZONE CENTER LINE, CLASS II                        |

CALCULATED  
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CHECKED  
DNM

LOCATION 2 SUB-SUMMARY

MUS - 209 - 0.00  
GUE - 209 - 0.00

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| LOCATION 3 SHEET TOTALS |     |    |     |    |        |       |     |     |      |    |     | ITEM    | ITEM EXT. | GRAND TOTALS | UNIT   | DESCRIPTION                                            |
|-------------------------|-----|----|-----|----|--------|-------|-----|-----|------|----|-----|---------|-----------|--------------|--------|--------------------------------------------------------|
| 2                       | 3   | 4  | 5   | 6  | 12     | 13    | 15  | 16  | 18   | 19 | 27  |         |           |              |        |                                                        |
|                         |     |    |     |    |        |       |     |     |      |    |     |         |           |              |        |                                                        |
|                         |     |    |     |    |        |       |     |     |      |    |     |         |           |              |        | ROADWAY                                                |
|                         | 370 |    |     |    |        |       | 468 |     |      |    |     | 202     | 23500     | 838          | SQ YD  | WEARING COURSE REMOVED                                 |
|                         |     |    |     |    |        | 2.95  |     |     |      |    |     | 209     | 72051     | 2.95         | MILE   | PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN    |
|                         |     |    |     |    |        |       |     |     |      |    |     |         |           |              |        | PAVEMENT                                               |
| 519                     |     |    |     |    |        |       |     |     |      |    |     | 253     | 02000     | 519.0        | CU YD  | PAVEMENT REPAIR                                        |
|                         |     |    |     |    | 17,346 |       |     |     |      |    |     | 254     | 01000     | 17,346       | SQ YD  | PAVEMENT PLANING, ASPHALT CONCRETE                     |
|                         | 3   |    |     |    |        |       |     |     |      |    |     | 304     | 20000     | 3            | CU YD  | AGGREGATE BASE                                         |
|                         |     |    |     |    | 1,301  |       | 36  |     |      |    |     | SPECIAL | 40720500  | 1,337        | GALLON | TACK COAT, TRACKLESS TACK                              |
|                         |     |    |     |    | 868    |       | 24  |     |      |    |     | SPECIAL | 40720510  | 892          | GALLON | TACK COAT, TRACKLESS TACK FOR INTERMEDIATE COURSE      |
|                         |     |    |     |    |        | 1,388 |     |     |      |    |     | 408     | 10001     | 1,388        | GALLON | PRIME COAT, AS PER PLAN                                |
|                         | 13  | 27 |     |    | 603    |       | 17  |     |      |    |     | 441     | 50100     | 660          | CU YD  | ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), 70-22M |
|                         | 8   |    |     |    | 482    |       | 7   |     |      |    |     | 441     | 50200     | 497          | CU YD  | ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448)    |
|                         |     |    |     |    |        |       |     | 120 |      |    |     | 516     | 31011     | 120          | FT     | 2" DEEP JOINT SEALER, AS PER PLAN                      |
|                         |     |    |     |    |        | 217   |     |     |      |    |     | 617     | 10101     | 217          | CU YD  | COMPACTED AGGREGATE, AS PER PLAN                       |
|                         |     |    |     |    |        |       |     |     |      |    |     |         |           |              |        | TRAFFIC CONTROL                                        |
|                         |     |    |     |    |        |       |     |     |      |    | 189 | 621     | 00100     | 189          | EACH   | RPM                                                    |
|                         |     |    |     |    |        |       |     |     |      |    | 189 | 621     | 54000     | 189          | EACH   | RAISED PAVEMENT MARKER REMOVED                         |
|                         |     |    |     |    |        |       |     |     |      | 67 |     | 644     | 00500     | 67           | FT     | STOP LINE                                              |
|                         |     |    |     |    |        |       |     |     | 3.06 |    |     | 648     | 00100     | 3.06         | MILE   | EDGE LINE, 4"                                          |
|                         |     |    |     |    |        |       |     |     | 1.53 |    |     | 648     | 00300     | 1.53         | MILE   | CENTER LINE                                            |
|                         |     |    |     |    |        |       |     |     |      |    |     |         |           |              |        | MAINTENANCE OF TRAFFIC                                 |
|                         |     |    | 14  |    |        |       |     |     |      |    |     | 614     | 12460     | 14           | EACH   | WORK ZONE MARKING SIGN                                 |
|                         |     |    | 1.6 |    |        |       |     |     |      |    |     | 614     | 13000     | 1.6          | CU YD  | ASPHALT CONCRETE FOR MAINTAINING TRAFFIC               |
|                         |     |    |     | 25 |        |       |     |     |      |    |     | 614     | 18401     | 25           | DAY    | PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN          |
|                         |     |    |     |    | 2.95   |       |     |     |      |    |     | 614     | 21400     | 2.95         | MILE   | WORK ZONE CENTER LINE, CLASS II                        |
|                         |     |    |     |    |        |       |     |     |      |    |     |         |           |              |        |                                                        |

LOCATION 3 SUB-SUMMARY

MUS-209-0.00  
GUE-209-0.00

| LOCATION 4 SHEET TOTALS |     |    |     |       |      |     |    |      |    |    | ITEM    | ITEM EXT. | GRAND TOTALS | UNIT   | DESCRIPTION                                            |
|-------------------------|-----|----|-----|-------|------|-----|----|------|----|----|---------|-----------|--------------|--------|--------------------------------------------------------|
| 2                       | 3   | 4  | 5   | 12    | 13   | 15  | 16 | 18   | 20 | 27 |         |           |              |        |                                                        |
|                         |     |    |     |       |      |     |    |      |    |    |         |           |              |        |                                                        |
|                         | 430 |    |     |       |      | 516 |    |      |    |    | 202     | 23500     | 946          | SQ YD  | ROADWAY                                                |
|                         |     |    |     |       |      |     |    |      |    |    |         |           |              |        | WEARING COURSE REMOVED                                 |
|                         |     |    |     |       | 1.05 |     |    |      |    |    | 209     | 72051     | 1.05         | MILE   | PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN    |
|                         |     |    |     |       |      |     |    |      |    |    |         |           |              |        |                                                        |
| 70                      |     |    |     |       |      |     |    |      |    |    | 253     | 02000     | 70           | CU YD  | PAVEMENT                                               |
|                         |     |    |     |       |      |     |    |      |    |    |         |           |              |        | PAVEMENT REPAIR                                        |
|                         |     |    |     | 6.281 | 306  |     |    |      |    |    | 254     | 01000     | 6,587        | SQ YD  | PAVEMENT PLANING, ASPHALT CONCRETE                     |
|                         | 3   |    |     |       |      |     |    |      |    |    | 304     | 20000     | 3            | CU YD  | AGGREGATE BASE                                         |
|                         |     |    |     | 472   | 23   | 39  |    |      |    |    | SPECIAL | 40720500  | 534          | GALLON | TACK COAT, TRACKLESS TACK                              |
|                         |     |    |     | 315   | 16   | 26  |    |      |    |    | SPECIAL | 40720510  | 357          | GALLON | TACK COAT, TRACKLESS TACK FOR INTERMEDIATE COURSE      |
|                         |     |    |     |       | 373  |     |    |      |    |    |         |           |              |        |                                                        |
|                         | 15  | 10 |     | 219   | 12   | 19  |    |      |    |    | 441     | 50100     | 275          | CU YD  | PRME COAT, AS PER PLAN                                 |
|                         | 9   |    |     | 175   | 9    | 8   |    |      |    |    | 441     | 50200     | 201          | CU YD  | ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), 70-22M |
|                         |     |    |     |       |      |     |    |      |    |    |         |           |              |        | ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448)    |
|                         |     |    |     |       |      |     | 76 |      |    |    | 516     | 31011     | 76           | FT     |                                                        |
|                         |     |    |     |       |      |     |    |      |    |    |         |           |              |        | 2" DEEP JOINT SEALER, AS PER PLAN                      |
|                         |     |    |     |       | 59   |     |    |      |    |    | 617     | 10101     | 59           | CU YD  |                                                        |
|                         |     |    |     |       |      |     |    |      |    |    |         |           |              |        | COMPACTED AGGREGATE, AS PER PLAN                       |
|                         |     |    |     |       |      |     |    |      |    |    |         |           |              |        |                                                        |
|                         |     |    |     |       |      |     |    |      |    | 56 | 621     | 00100     | 56           | EACH   | TRAFFIC CONTROL                                        |
|                         |     |    |     |       |      |     |    |      |    | 56 | 621     | 54000     | 56           | EACH   | RPM                                                    |
|                         |     |    |     |       |      |     |    |      |    |    |         |           |              |        | RAISED PAVEMENT MARKER REMOVED                         |
|                         |     |    |     |       |      |     |    |      | 92 |    | 644     | 00500     | 92           | FT     |                                                        |
|                         |     |    |     |       |      |     |    | 1.14 |    |    | 648     | 00100     | 1.14         | MILE   | STOP LINE                                              |
|                         |     |    |     |       |      |     |    | 0.57 |    |    | 648     | 00300     | 0.57         | MILE   | EDGE LINE, 4"                                          |
|                         |     |    |     |       |      |     |    |      |    |    |         |           |              |        | CENTER LINE                                            |
|                         |     |    |     |       |      |     |    |      |    |    |         |           |              |        |                                                        |
|                         |     |    | 20  |       |      |     |    |      |    |    |         |           |              |        | MAINTENANCE OF TRAFFIC                                 |
|                         |     |    | 0.8 |       |      |     |    |      |    |    | 614     | 12460     | 20           | EACH   | WORK ZONE MARKING SIGN                                 |
|                         |     |    |     |       |      |     |    |      |    |    | 614     | 13000     | 0.8          | CU YD  | ASPHALT CONCRETE FOR MAINTAINING TRAFFIC               |
|                         |     |    |     | 1.05  |      |     |    |      |    |    | 614     | 21400     | 1.05         | MILE   | WORK ZONE CENTER LINE, CLASS II                        |
|                         |     |    |     |       |      |     |    |      |    |    |         |           |              |        |                                                        |

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| LOCATION 5 SHEET TOTALS |      |   |   |       |       |    |    |       | ITEM    | ITEM EXT. | GRAND TOTALS | UNIT   | DESCRIPTION                                       |
|-------------------------|------|---|---|-------|-------|----|----|-------|---------|-----------|--------------|--------|---------------------------------------------------|
| 2                       | 3    | 5 | 6 | 12    | 15    | 18 | 20 | 32    |         |           |              |        |                                                   |
|                         |      |   |   |       |       |    |    |       |         |           |              |        |                                                   |
|                         |      |   |   |       |       |    |    | 84    | 202     | 23000     | 84           | SQ YD  | ROADWAY                                           |
|                         |      |   |   |       | 1,323 |    |    |       | 202     | 23500     | 1,323        | SQ YD  | PAVEMENT REMOVED                                  |
|                         |      |   |   |       |       |    |    | 2,241 | 202     | 30000     | 2,241        | SQ FT  | WEARING COURSE REMOVED                            |
|                         |      |   |   |       |       |    |    | 132   | 202     | 32000     | 132          | FT     | WALK REMOVED                                      |
|                         |      |   |   |       |       |    |    | 2     | 202     | 98100     | 2            | EACH   | CURB REMOVED                                      |
|                         |      |   |   |       |       |    |    |       |         |           |              |        | REMOVAL MISC: UTILITY POLE FOUNDATION REMOVED     |
|                         |      |   |   |       |       |    |    | 10    | 203     | 10000     | 10           | CU YD  |                                                   |
|                         |      |   |   |       |       |    |    |       |         |           |              |        | EXCAVATION                                        |
|                         |      |   |   |       |       |    |    | 28    | 204     | 10000     | 28           | SQ YD  |                                                   |
|                         |      |   |   |       |       |    |    | 86    | 252     | 01500     | 86           | FT     | SUBGRADE COMPACTION                               |
|                         | 14   |   |   |       |       |    |    |       | 653     | 10000     | 14           | CU YD  | FULL DEPTH PAVEMENT SAWING                        |
|                         |      |   |   |       |       |    |    |       |         |           |              |        |                                                   |
|                         |      |   |   |       |       |    |    |       |         |           |              |        | EROSION CONTROL                                   |
|                         | 56   |   |   |       |       |    |    |       | 659     | 500       | 56           | SQ YD  | SEEDING AND MULCHING, CLASS 1                     |
|                         | 3    |   |   |       |       |    |    |       | 659     | 14000     | 3            | SQ YD  | REPAIR SEEDING AND MULCHING                       |
|                         | 3    |   |   |       |       |    |    |       | 659     | 15000     | 3            | SQ YD  | INTER-SEEDING                                     |
|                         | 0.02 |   |   |       |       |    |    |       | 659     | 20000     | 0.02         | TON    | COMMERCIAL FERTILIZER                             |
|                         | 0.02 |   |   |       |       |    |    |       | 659     | 31000     | 0.02         | ACRE   | LIME                                              |
|                         | 1    |   |   |       |       |    |    |       | 659     | 35000     | 1            | M GAL  | WATER                                             |
|                         |      |   |   |       |       |    |    |       |         |           |              |        |                                                   |
|                         |      |   |   |       |       |    |    |       |         |           |              |        | DRAINAGE                                          |
|                         | 11   |   |   |       |       |    |    |       | 611     | 98630     | 11           | EACH   | CATCH BASIN ADJUSTED TO GRADE                     |
|                         | 1    |   |   |       |       |    |    |       | 611     | 98634     | 1            | EACH   | CATCH BASIN RECONSTRUCTED TO GRADE                |
|                         | 11   |   |   |       |       |    |    |       | 611     | 99654     | 11           | EACH   | MANHOLE ADJUSTED TO GRADE                         |
|                         |      |   |   |       |       |    |    |       |         |           |              |        |                                                   |
| 18                      |      |   |   |       |       |    |    |       |         |           |              |        | PAVEMENT                                          |
|                         |      |   |   |       |       |    |    |       | 253     | 02000     | 18           | CU YD  | PAVEMENT REPAIR                                   |
|                         |      |   |   | 8,536 |       |    |    |       | 254     | 01000     | 8,536        | SQ YD  |                                                   |
|                         |      |   |   |       |       |    |    | 10    | 302     | 46000     | 10           | CU YD  | PAVEMENT PLANING, ASPHALT CONCRETE                |
|                         |      |   |   |       |       |    |    |       |         |           |              |        | ASPHALT CONCRETE BASE, PG64-22                    |
|                         |      |   |   | 641   | 105   |    |    |       | SPECIAL | 40720500  | 746          | GALLON |                                                   |
|                         |      |   |   | 427   | 12    |    |    |       | SPECIAL | 40720510  | 439          | GALLON | TACK COAT, TRACKLESS TACK                         |
|                         |      |   |   |       |       |    |    |       |         |           |              |        | TACK COAT, TRACKLESS TACK FOR INTERMEDIATE COURSE |

| LOCATION 5 SHEET TOTALS |   |     |    |      |    |      |     |       | ITEM | ITEM EXT. | GRAND TOTALS | UNIT  | DESCRIPTION                                            |
|-------------------------|---|-----|----|------|----|------|-----|-------|------|-----------|--------------|-------|--------------------------------------------------------|
| 2                       | 3 | 5   | 6  | 12   | 15 | 18   | 20  | 32    |      |           |              |       |                                                        |
|                         |   |     |    |      |    |      |     |       |      |           |              |       |                                                        |
|                         |   |     |    |      |    |      |     |       |      |           |              |       | PAVEMENT                                               |
|                         |   |     |    | 297  | 49 |      |     |       | 441  | 50100     | 346          | CU YD | ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), 70-22M |
|                         |   |     |    | 238  | 7  |      |     |       | 441  | 50200     | 245          | CU YD | ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448)    |
|                         |   |     |    |      |    |      |     | 2,659 | 608  | 10000     | 2,659        | SQ FT | 4" CONCRETE WALK                                       |
|                         |   |     |    |      |    |      |     | 280   | 609  | 26000     | 280          | FT    | CURB, TYPE 6                                           |
|                         |   |     |    |      |    |      |     | 6     | 690  | 98000     | 6            | EACH  | SPECIAL - MISC.: CURB RAMP, TYPE A2                    |
|                         |   |     |    |      |    |      |     | 1     | 690  | 98000     | 1            | EACH  | SPECIAL - MISC.: CURB RAMP, TYPE B2                    |
|                         |   |     |    |      |    |      |     | 80    | 690  | 98200     | 80           | SQ FT | SPECIAL - MISC.: DETECTABLE WARNING                    |
|                         |   |     |    |      |    |      |     |       |      |           |              |       |                                                        |
|                         |   |     |    |      |    |      |     |       |      |           |              |       | WATER WORK                                             |
|                         | 8 |     |    |      |    |      |     |       | 638  | 10800     | 8            | EACH  | VALVE BOX ADJUSTED TO GRADE                            |
|                         |   |     |    |      |    |      |     |       |      |           |              |       |                                                        |
|                         |   |     |    |      |    |      |     |       |      |           |              |       | TRAFFIC CONTROL                                        |
|                         |   |     |    |      |    |      | 95  |       | 644  | 00400     | 95           | FT    | CHANNELIZING LINE, 8"                                  |
|                         |   |     |    |      |    |      | 151 |       | 644  | 00500     | 151          | FT    | STOP LINE                                              |
|                         |   |     |    |      |    |      | 894 |       | 644  | 00601     | 894          | FT    | CROSSWALK LINE, AS PER PLAN                            |
|                         |   |     |    |      |    |      | 1   |       | 644  | 01300     | 1            | EACH  | LANE ARROW                                             |
|                         |   |     |    |      |    |      | 1   |       | 644  | 01400     | 1            | EACH  | WORD ON PAVEMENT, 72"                                  |
|                         |   |     |    |      |    |      |     |       |      |           |              |       |                                                        |
|                         |   |     |    |      |    | 0.10 |     |       | 648  | 00100     | 0.10         | MILE  | EDGE LINE, 4"                                          |
|                         |   |     |    |      |    | 0.47 |     |       | 648  | 00300     | 0.47         | MILE  | CENTER LINE                                            |
|                         |   |     |    |      |    |      |     |       |      |           |              |       |                                                        |
|                         |   |     |    |      |    |      |     |       |      |           |              |       | MAINTENANCE OF TRAFFIC                                 |
|                         |   | 80  |    |      |    |      |     |       | 614  | 11110     | 80           | HOURL | LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE |
|                         |   | 11  |    |      |    |      |     |       | 614  | 12460     | 11           | EACH  | WORK ZONE MARKING SIGN                                 |
|                         |   | 1.2 |    |      |    |      |     |       | 614  | 13000     | 1.2          | CU YD | ASPHALT CONCRETE FOR MAINTAINING TRAFFIC               |
|                         |   |     | 25 |      |    |      |     |       | 614  | 18401     | 25           | DAY   | PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN          |
|                         |   |     |    | 0.94 |    |      |     |       | 614  | 21400     | 0.94         | MILE  | WORK ZONE CENTER LINE, CLASS II                        |
|                         |   |     |    |      |    |      |     |       |      |           |              |       |                                                        |

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| LOCATION TOTALS |            |            |            |            | FUNDING PARTICIPATION |           |           |           |               | ITEM    | ITEM EXT. | GRAND TOTALS | UNIT   | DESCRIPTION                                         | SEE SHEET |
|-----------------|------------|------------|------------|------------|-----------------------|-----------|-----------|-----------|---------------|---------|-----------|--------------|--------|-----------------------------------------------------|-----------|
| LOCATION 1      | LOCATION 2 | LOCATION 3 | LOCATION 4 | LOCATION 5 | LOC 5                 | LOC 1 & 2 | LOC 3     | LOC 4     | LOC 5         |         |           |              |        |                                                     |           |
|                 |            |            |            |            | 01/S<2/PV/CAMB        | 02/NFA/PV | 03/STR/PV | 04/S<2/PV | 5/S<2/OT/CAMB |         |           |              |        |                                                     |           |
|                 |            |            |            |            |                       |           |           |           |               |         |           |              |        |                                                     |           |
|                 |            |            |            |            |                       |           |           |           |               |         |           |              |        |                                                     |           |
|                 |            |            |            | 84         |                       |           |           |           | 84            | 202     | 23000     | 84           | SQ YD  | PAVEMENT REMOVED                                    |           |
| 1,569           | 3,507      | 838        | 946        | 1,323      | 1,323                 | 5,076     | 838       | 946       |               | 202     | 23500     | 8,183        | SQ YD  | WEARING COURSE REMOVED                              |           |
|                 |            |            |            | 2,241      |                       |           |           |           | 2,241         | 202     | 30000     | 2,241        | SQ FT  | WALK REMOVED                                        |           |
|                 |            |            |            | 132        |                       |           |           |           | 132           | 202     | 32000     | 132          | FT     | CURB REMOVED                                        |           |
|                 |            |            |            | 2          |                       |           |           |           | 2             | 202     | 98100     | 2            | EACH   | REMOVAL MISC: UTILITY POLE FOUNDATION REMOVED       | 2         |
|                 |            |            |            |            |                       |           |           |           |               |         |           |              |        |                                                     |           |
|                 |            |            |            | 10         | 10                    |           |           |           |               | 203     | 10000     | 10           | CU YD  | EXCAVATION                                          |           |
|                 |            |            |            |            |                       |           |           |           |               |         |           |              |        |                                                     |           |
|                 |            |            |            | 28         | 28                    |           |           |           |               | 204     | 10000     | 28           | SQ YD  | SUBGRADE COMPACTION                                 |           |
|                 |            |            |            |            |                       |           |           |           |               |         |           |              |        |                                                     |           |
| 3.28            | 11.08      | 2.95       | 1.05       |            |                       | 14.36     | 2.95      | 1.05      |               | 209     | 72051     | 18.36        | MILE   | PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN | 2         |
|                 |            |            |            |            |                       |           |           |           |               |         |           |              |        |                                                     |           |
|                 |            |            |            | 86         | 86                    |           |           |           |               | 252     | 01500     | 86           | FT     | FULL DEPTH PAVEMENT SAWING                          |           |
|                 |            |            |            |            |                       |           |           |           |               |         |           |              |        |                                                     |           |
|                 |            |            |            | 14         |                       |           |           |           | 14            | 653     | 10000     | 14           | CU YD  | TOPSOIL FURNISHED AND PLACED                        |           |
|                 |            |            |            |            |                       |           |           |           |               |         |           |              |        |                                                     |           |
|                 |            |            |            |            |                       |           |           |           |               |         |           |              |        |                                                     |           |
|                 |            |            |            | 56         |                       |           |           |           | 56            | 659     | 00500     | 56           | SQ YD  | SEEDING AND MULCHING, CLASS 1                       |           |
|                 |            |            |            | 3          |                       |           |           |           | 3             | 659     | 14000     | 3            | SQ YD  | REPAIR SEEDING AND MULCHING                         |           |
|                 |            |            |            | 3          |                       |           |           |           | 3             | 659     | 15000     | 3            | SQ YD  | INTER-SEEDING                                       |           |
|                 |            |            |            | 0.02       |                       |           |           |           | 0.02          | 659     | 20000     | 0.02         | TON    | COMMERCIAL FERTILIZER                               |           |
|                 |            |            |            | 0.02       |                       |           |           |           | 0.02          | 659     | 31000     | 0.02         | ACRE   | LIME                                                |           |
|                 |            |            |            | 1          |                       |           |           |           | 1             | 659     | 35000     | 1            | MGAL   | WATER                                               |           |
|                 |            |            |            |            |                       |           |           |           |               |         |           |              |        |                                                     |           |
|                 |            |            |            |            |                       |           |           |           |               |         |           |              |        |                                                     |           |
|                 |            |            |            | 11         | 11                    |           |           |           |               | 611     | 98630     | 11           | EACH   | CATCH BASIN ADJUSTED TO GRADE                       |           |
|                 |            |            |            | 1          | 1                     |           |           |           |               | 611     | 98634     | 1            | EACH   | CATCH BASIN RECONSTRUCTED TO GRADE                  |           |
|                 |            |            |            | 11         | 11                    |           |           |           |               | 611     | 99654     | 11           | EACH   | MANHOLE ADJUSTED TO GRADE                           |           |
|                 |            |            |            |            |                       |           |           |           |               |         |           |              |        |                                                     |           |
|                 |            |            |            |            |                       |           |           |           |               |         |           |              |        |                                                     |           |
|                 |            |            |            |            |                       |           |           |           |               |         |           |              |        |                                                     |           |
|                 |            |            |            |            |                       |           |           |           |               |         |           |              |        |                                                     |           |
| 778             | 2,075      | 519        | 70         | 18         | 18                    | 2,853     | 519       | 70        |               | 253     | 02000     | 3,460        | CU YD  | PAVEMENT REPAIR                                     |           |
|                 |            |            |            |            |                       |           |           |           |               |         |           |              |        |                                                     |           |
| 19,243          | 65,003     | 17,346     | 6,587      | 8,536      | 8,536                 | 84,246    | 17,346    | 6,587     |               | 254     | 01000     | 116,715      | SQ YD  | PAVEMENT PLANING, ASPHALT CONCRETE                  |           |
|                 |            |            |            |            |                       |           |           |           |               |         |           |              |        |                                                     |           |
|                 |            |            |            | 10         | 10                    |           |           |           |               | 302     | 46000     | 10           | CU YD  | ASPHALT CONCRETE BASE, PG64-22                      |           |
|                 |            |            |            |            |                       |           |           |           |               |         |           |              |        |                                                     |           |
| 4               | 9          | 3          | 3          |            |                       | 13        | 3         | 3         |               | 304     | 20000     | 19           | CU YD  | AGGREGATE BASE                                      |           |
|                 |            |            |            |            |                       |           |           |           |               |         |           |              |        |                                                     |           |
| 1,528           | 5,036      |            |            |            |                       | 6,564     |           |           |               | 407     | 10000     | 6,564        | GALLON | TACK COAT                                           |           |
| 1,019           | 3,358      |            |            |            |                       | 4,377     |           |           |               | 407     | 14000     | 4,377        | GALLON | TACK COAT FOR INTERMEDIATE COURSE                   |           |
|                 |            | 1,337      | 534        | 746        | 746                   |           | 1,337     | 534       |               | SPECIAL | 40720500  | 2,617        | GALLON | TACK COAT, TRACKLESS TACK                           | 4         |
|                 |            | 892        | 357        | 439        | 439                   |           | 892       | 357       |               | SPECIAL | 40720510  | 1,688        | GALLON | TACK COAT, TRACKLESS TACK FOR INTERMEDIATE COURSE   | 4         |
|                 |            |            |            |            |                       |           |           |           |               |         |           |              |        |                                                     |           |
| 1,540           | 5,201      | 1,388      | 373        |            |                       | 6,741     | 1,388     | 373       |               | 408     | 10001     | 8,502        | GALLON | PRIME COAT, AS PER PLAN                             | 2         |
|                 |            |            |            |            |                       |           |           |           |               |         |           |              |        |                                                     |           |

GENERAL SUMMARY

MUS - 209 - 0.00  
GUE - 209 - 0.00

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CHECKED  
DNM

| LOCATION TOTALS |            |            |            |            | FUNDING PARTICIPATION |           |           |           |                | ITEM | ITEM EXT. | GRAND TOTALS | UNIT  | DESCRIPTION                                                | SEE SHEET |
|-----------------|------------|------------|------------|------------|-----------------------|-----------|-----------|-----------|----------------|------|-----------|--------------|-------|------------------------------------------------------------|-----------|
| LOCATION 1      | LOCATION 2 | LOCATION 3 | LOCATION 4 | LOCATION 5 | LOC 5                 | LOC 1 & 2 | LOC 3     | LOC 4     | LOC 5          |      |           |              |       |                                                            |           |
|                 |            |            |            |            | 01/S<2/PV/CAMB        | 02/NFA/PV | 03/STR/PV | 04/S<2/PV | 05/S<2/OT/CAMB |      |           |              |       |                                                            |           |
|                 |            |            |            |            |                       |           |           |           |                |      |           |              |       | PAVEMENT                                                   |           |
| 754             | 2,482      | 660        | 275        | 346        | 346                   | 3,236     | 660       | 275       |                | 441  | 50100     | 4,517        | CU YD | ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), 70-22M     |           |
| 559             | 1,865      | 497        | 201        | 245        | 245                   | 2,424     | 497       | 201       |                | 441  | 50200     | 3,367        | CU YD | ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448)        |           |
|                 |            | 120        | 76         |            |                       |           | 120       | 76        |                | 516  | 31011     | 196          | FT    | 2" DEEP JOINT SEALER, AS PER PLAN                          | 3         |
|                 |            |            |            | 2,659      |                       |           |           |           | 2,659          | 608  | 10000     | 2,659        | SQ FT | 4" CONCRETE WALK                                           |           |
|                 |            |            |            | 280        |                       |           |           |           | 280            | 609  | 26000     | 280          | FT    | CURB, TYPE 6                                               |           |
| 241             | 813        | 217        | 59         |            |                       | 1054      | 217       | 59        |                | 617  | 10101     | 1,330        | CU YD | COMPACTED AGGREGATE, AS PER PLAN                           | 3         |
|                 |            |            |            | 6          |                       |           |           |           | 6              | 690  | 98000     | 6            | EACH  | SPECIAL - MISC.: CURB RAMP, TYPE A2                        |           |
|                 |            |            |            | 1          |                       |           |           |           | 1              | 690  | 98000     | 1            | EACH  | SPECIAL - MISC.: CURB RAMP, TYPE B2                        |           |
|                 |            |            |            | 80         |                       |           |           |           | 80             | 690  | 98200     | 80           | SQ FT | SPECIAL - MISC.: DETECTABLE WARNING                        |           |
|                 |            |            |            |            |                       |           |           |           |                |      |           |              |       | WATER WORK                                                 |           |
|                 |            |            |            | 8          | 8                     |           |           |           |                | 638  | 10800     | 8            | EACH  | VALVE BOX ADJUSTED TO GRADE                                |           |
|                 |            |            |            |            |                       |           |           |           |                |      |           |              |       | TRAFFIC CONTROL                                            |           |
| 232             | 723        | 189        | 56         |            |                       | 955       | 189       | 56        |                | 621  | 00100     | 1,200        | EACH  | RPM                                                        |           |
| 232             | 723        | 189        | 56         |            |                       | 955       | 189       | 56        |                | 621  | 54000     | 1,200        | EACH  | RAISED PAVEMENT MARKER REMOVED                             |           |
|                 |            |            |            | 95         | 95                    |           |           |           |                | 644  | 00400     | 95           | FT    | CHANNELIZING LINE, 8"                                      |           |
| 115             | 295        | 67         | 92         | 151        | 151                   | 410       | 67        | 92        |                | 644  | 00500     | 720          | FT    | STOP LINE                                                  |           |
|                 |            |            |            | 894        | 894                   |           |           |           |                | 644  | 00601     | 894          | FT    | CROSSWALK LINE, AS PER PLAN                                | 4         |
|                 |            |            |            | 1          | 1                     |           |           |           |                | 644  | 01300     | 1            | EACH  | LANE ARROW                                                 |           |
|                 |            |            |            | 1          | 1                     |           |           |           |                | 644  | 01400     | 1            | EACH  | WORD ON PAVEMENT, 72"                                      |           |
| 3.28            | 11.08      | 3.06       | 1.14       | 0.10       | 0.10                  | 14.36     | 3.06      | 1.14      |                | 648  | 00100     | 18.66        | MILE  | EDGE LINE, 4"                                              |           |
| 1.64            | 5.54       | 1.53       | 0.57       | 0.47       | 0.47                  | 7.18      | 1.53      | 0.57      |                | 648  | 00300     | 9.75         | MILE  | CENTER LINE                                                |           |
|                 |            |            |            |            |                       |           |           |           |                |      |           |              |       | MAINTENANCE OF TRAFFIC                                     |           |
|                 |            |            |            | 80         | 80                    |           |           |           |                | 614  | 11110     | 80           | hour  | LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE     |           |
| 14              | 58         | 14         | 20         | 11         | 11                    | 72        | 14        | 20        |                | 614  | 12460     | 117          | EACH  | WORK ZONE MARKING SIGN                                     |           |
| 0.4             |            | 1.6        | 0.8        | 1.2        | 1.2                   | 0.4       | 1.6       | 0.8       |                | 614  | 13000     | 4            | CU YD | ASPHALT CONCRETE FOR MAINTAINING TRAFFIC                   |           |
|                 |            | 25         |            | 25         | 25                    |           | 25        |           |                | 614  | 18401     | 50           | DAY   | PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN              | 6         |
| 3.28            | 11.08      | 2.95       | 1.05       | 0.94       | 0.94                  | 14.36     | 2.95      | 1.05      |                | 614  | 21400     | 19.30        | MILE  | WORK ZONE CENTER LINE, CLASS II                            |           |
|                 |            |            |            |            |                       |           |           |           |                |      |           |              |       | INCIDENTALS                                                |           |
|                 |            |            |            |            | 12%                   | 59%       | 18%       | 11%       |                | 103  | 05000     | LUMP         |       | PREMIUM FOR CONTRACT PERFORMANCE BOND AND FOR PAYMENT BOND |           |
|                 |            |            |            |            | 12%                   | 59%       | 18%       | 11%       |                | 614  | 11000     | LUMP         |       | MAINTAINING TRAFFIC                                        |           |
|                 |            |            |            |            | 12%                   | 59%       | 18%       | 11%       |                | 623  | 10000     | LUMP         |       | CONSTRUCTION LAYOUT STAKES AND SURVEYING                   |           |
|                 |            |            |            |            | 12%                   | 59%       | 18%       | 11%       |                | 624  | 10000     | LUMP         |       | MOBILIZATION                                               |           |

GENERAL SUMMARY

MUS - 209 - 0.00  
GUE - 209 - 0.00